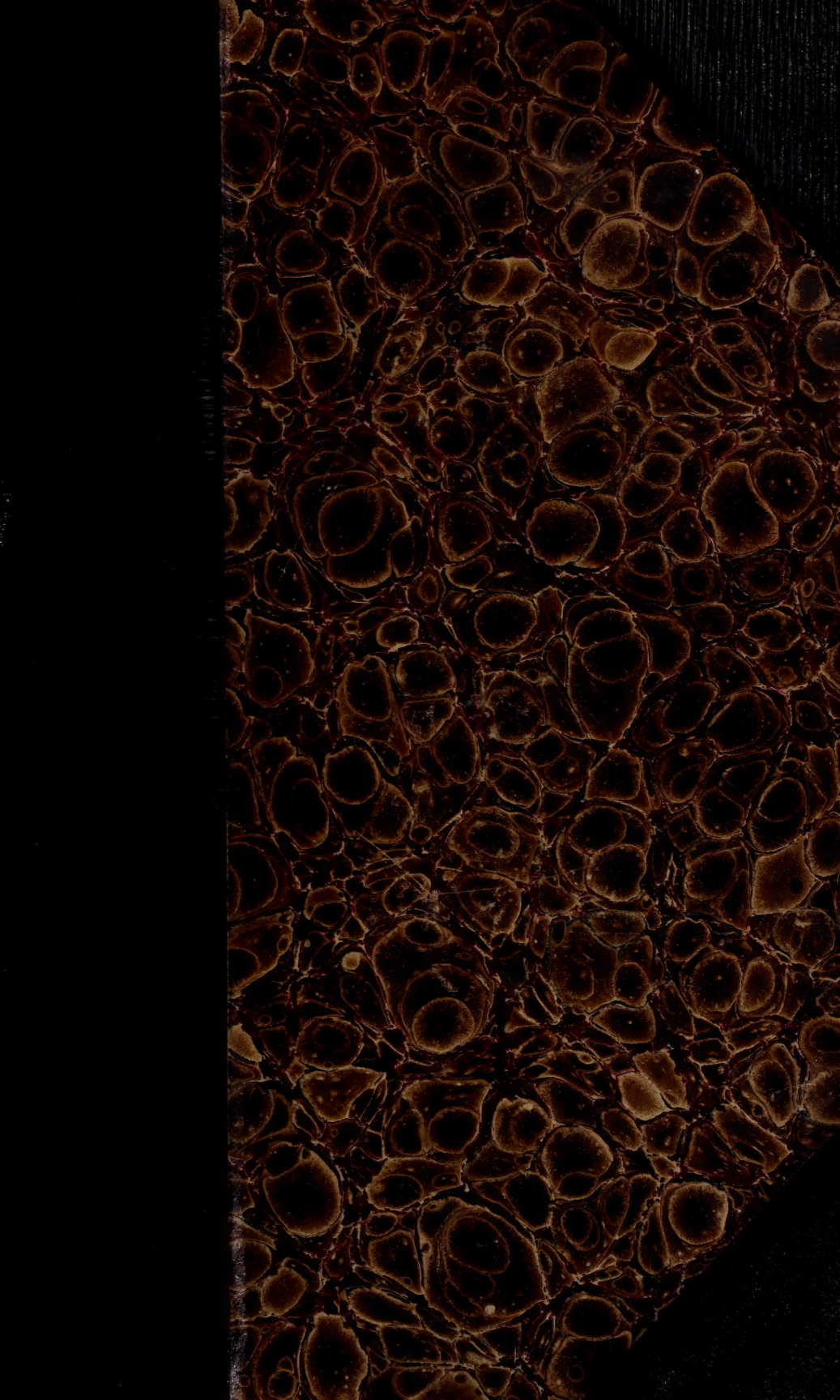
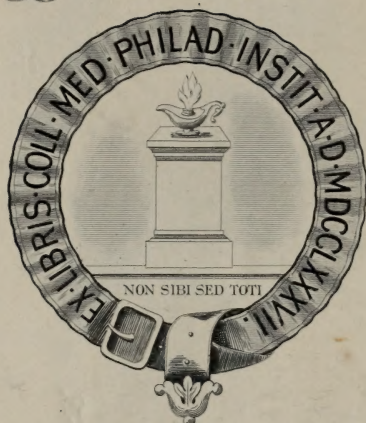




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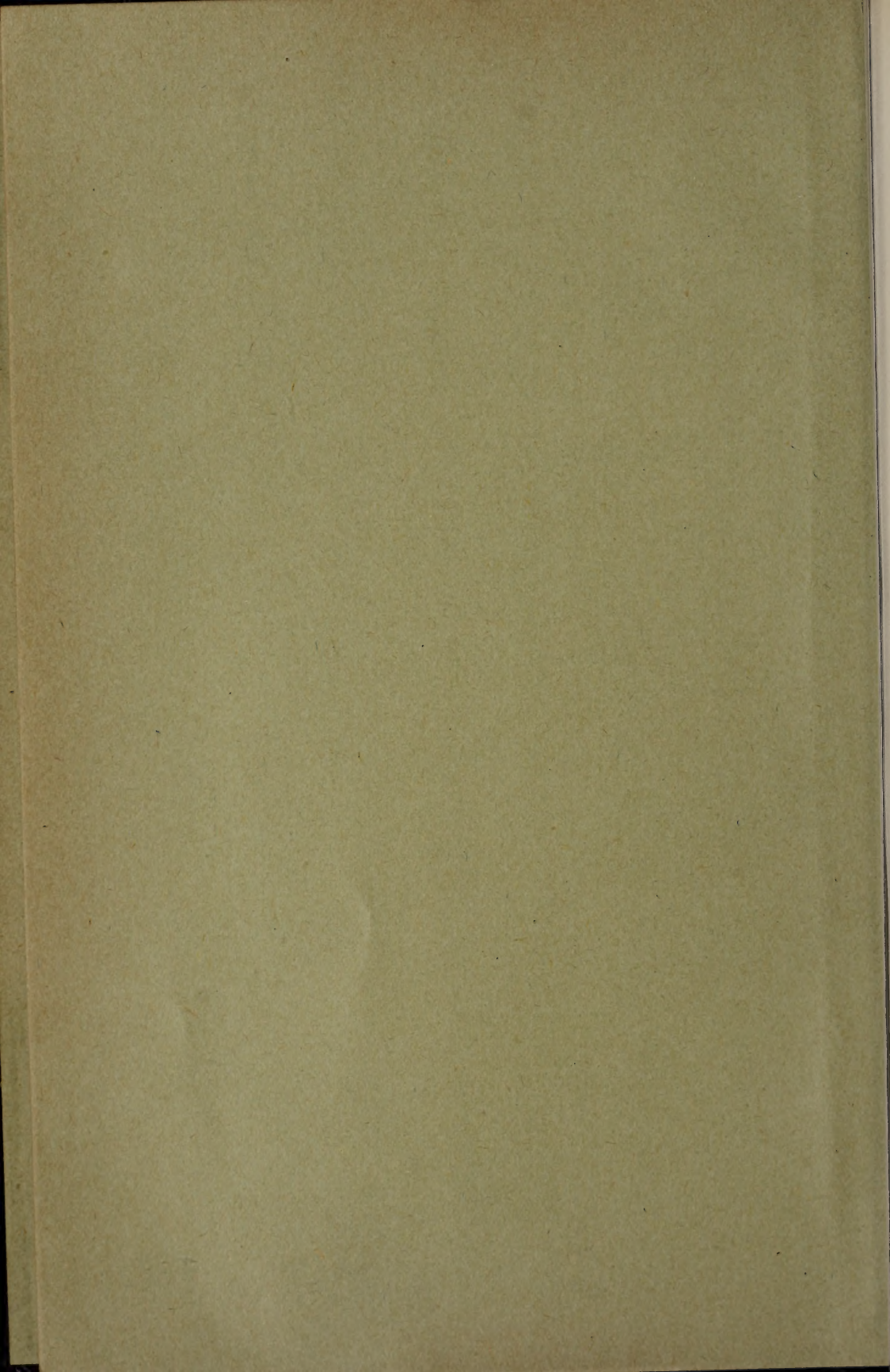


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No. I.

ORIGINAL COMMUNICATIONS.

Some Curiosities of Medical Practice.¹

By CHAUNCEY PELTON SMITH, M. D., Buffalo, N. Y.

THIS society has had the pleasure of listening to historical subjects by various men, but as far as I am aware no one has considered medicine. With your consent, I will try to give you some of the curious phases of the practice of medicine in the past, connecting them with our own follies of the present.

Many present have attended lectures on medicine and other subjects, so let me read to you the manner of giving an anatomical lecture in 1581. This lectureship was founded by Lord Lumley and is in existence today. The stewards were ordered "to see and provide that there be every year a mat about the hearth in the hall that Mr. Doctor be made not to take cold upon his feet, nor other gentlemen that do come and mark the anatomy to learn knowledge. And, further, that there be two fine white rods appointed for the doctor to touch the body where it please him; and a wax candle to look into the body, and that there be always two aprons to be from the shoulder downward and two pairs of sleeves for his whole arm with tapes" The doctor was directed "to dissect openly in the reading place all the body of man, especially the inward parts, for five days together, as well before as after dinner, if the bodies may last so long without annoy." Between the lectures it was the custom for the audience to regale themselves and spiced wine was presented after each lecture. This thoughtfulness on the part of the benefactor in providing refreshments after each lecture is a custom which might be followed today, for often it is needed.

The great fire in London was looked upon as a catastrophe, which, no doubt, it was, but at the same time it cleaned the city as it never had been before, and saved it from future visits of the great plague. As conditions breed customs, let me quote

1. An address delivered before the Buffalo Historical Society, May 17, 1903.

from Erasmus and thus convey an idea of the filth in the houses. "The floors," he says in his letters, "are commonly of clay, strewed with rushes under which lie undisturbed an ancient collection of fleas, grease, fragments of bone, spittle, excrement of dogs and cats and everything that is nasty." If such was the condition of the well-to-do, what must have been that of the poorer classes? Smollett speaks of the sewage question in the *Adventures of Peregrine Pickle*, when at that time it was the custom to empty out of the window early in the morning the buckets in use during the night and to cry "look out." Unfortunately the warning was often uttered too late. Yet is it very different today in Baltimore where the sewage is open and where through the gutters runs unspeakable filth? Is there much difference between the floors of which Erasmus speaks and the omnipresent feather bed, "the bed which belonged to Grandmother," whose accumulated filth of deaths, sickness, diseases and births are carefully preserved and, added to from generation to generation, are handed down with such extraordinary care?

With such conditions as we have spoken of in England several hundred years ago, it is little wonder the plague and small-pox made such ravages. In such times when thousands were dying daily, irregular practioners sprang up all over the kingdom. We find in the *Oxford Journal* of February 11, 1758, the following advertisement:

I, George Ridler, near Stroud, in the County of Gloster, Broadweaver, at the desire of the people hereabout, do give nautis, that I have inokelated these two seasons past, between two or 300 for the smallpox, and but two or three of them died; a mainy people be afearred of the thing, but exaith it is no more than scrattin a bit of a haul in their yarm, a pushing in a piece of skraped rag dipt in some of the pocky matter of a child under the distemper. That every body in the nation may be served, I will, God willing, undertake to inokelate them with the per-vizer that they will take the purges before hand, and lose a little blood away, for half a crown a head, and I will be bould to say, nobody goes beyond me.

N. B. Poor volk at a shilling a head, *but all must pay for the purging.*

As the disease was eradicated there must have been an overcrowding of the profession—a condition which is not unknown today—for we see in the want column of a paper of the period the following:

Wanted for a family who have had bad health, a sober, steady person, in the capacity of doctor, surgeon, apothecary, and man

midwife. He must occasionally act as butler, and dress hair and wigs. He will be required sometimes to read prayers and to preach a sermon every Sunday. A good salary will be given.

This is almost as interesting as the *Herald* personals.

To those who have suffered, who have been subjected to all manner of cruel and disgusting practices, our sympathy should go. We do not appreciate now, those whom we might call the martyrs of medicine. They have certainly paved the way for the modern preparations of the pharmacist's art and surgical science. In the time of Henry VIII., the surgeon of the period dressed wounds with acid balsams, so that matter might form, which was considered necessary for a cure, every flap of skin being cut away. Wounds were seldom sewn, but if too small, were dilated with hideous forceps and torn open. In compound fractures, dressings were thrust between the ends of the bones so they would heal! Bullet wounds, considered poisonous from being inflicted by lead, were treated with applications of red-hot irons and boiling oil. It was only the result of an accident that caused simpler methods to be used. Ambrose Paré, who was the chief surgeon of the French for 25 years, found in one of the sieges of the army, that his supply of boiling oil had given out and he was obliged to use simpler applications, though not without serious apprehensions of finding his patients in horrible condition. To his astonishment he found those treated without the boiling oil were in far better condition than those treated with it, hence less barbarous methods were substituted.

This same Ambrose Paré wrote a book and as a modest man—as surgeons are apt to be—he wrote the following in the preface:

You must know that for the space of three years I have lived in the Hotel Dieu, of Paris, where I had the means of seeing and knowing *all* which can be of alteration and disease in the human body, and to learn from an infinite number of dead *all* that can be said of anatomy.

Paré was a good anatomist and by far the greatest surgeon of his time, the confidential friend of four successive kings, and is said to have been the only Protestant in Paris who was spared the massacre of St. Bartholomew's, a circumstance due to the direct action of the king. (Billings.) That the surgeon was well named,—the derivation being *ergon*, work, and *cheiro*, the hand—(we get the same derivation in "Cheiro" the palmist, who by the way learns much from our old friends, and who shows that we are still in the coils of superstition, omens and

signs), the following account of one gentleman's method concerning amputations, would bear witness:

"First of all advise the patient to resign himself to God, to confess his sins, to remember the suffering of our Lord with thanks and the surgeon the same; thus will God grant him good fortune in his work."

Another account of an eye witness of an operation (diary of the Rev. John Ward, Vicar of Stratford-on-Avon, extending from 1648-1679): "A cancer in Mrs. Townsend's breast, of Alverson, taken off by two surgeons . . . First they cutt the skin cross and laid itt back, then they worked their hands in itt, one above and another below, and so till their hands mett, and so brought it out . . . There came out a great quantitie of waterish substance, as much as would fill a flagon. They put in a glass of wine and some lint, and so lett itt alone until the next day; then they opened itt again, and injected myrrhe, aloes and such things, as resisted putrefaction and then bound it up againe . . . The way how it should be cutt was markt with ink by one Dr. Edwards. Gill told me of a woman that had an apotheme about the side, and his master intended to trepan her on one of the ribs, whether it cannot be; I suspected itt to be a ly."

Guy de Chauliac, a French surgeon, flourished in the XIV. century, and in 1363 wrote a treatise on surgery, which he divided into five parts. Only one interests us,—namely, the fifth, from which I quote: "The fifth sect is of women and many fools, who refer the sick of all diseases to the saints, solely saying, "The Lord has given me that which it has pleased him. The Lord will show me what it pleases him. Let the name of the Lord be praised. Amen." This was written nearly six hundred years ago, but does it not hold true today of the misguided who travel to Lourdes and other shrines in search of health through religious intervention? Saint Anne de Beauprée was unknown at that time. From the fallacy of the wondrous power of healing of sacred objects and religious celebrities, it is easy to pass one step further down in the scale, and come to the wondrous power of healing by the weapon which produced the wound,—the sympathetic or magnetic cure of wounds. The cure was to anoint the bloody sword or other weapon which had inflicted the wound, or a stone or cloth dipped in the blood as it flowed from the wound, with a special ointment, and put it away carefully and apply nothing to the wound but some lint. (Billings.) This idea in a modified form is still existent today, as everyone is familiar with the superstition of killing the dog that has bitten a person to prevent madness. In some parts of

the country the cure for a dog bite is to take several of the dog's hairs and smear them with blood from the wound, bury them, after which hydrophobia need not be feared.

But here is a learned gentleman, one Dr. Caius, who devoted a treatise to the medical properties of a well-known lap-dog, to which he gives the names of "Gentle Spaniel." He says:

These little dogs are good to assuage the sickness of the stomach, being often times thereunto applied as a plaister preservative, or borne in the bosom of the diseased and weak person, which effect is performed by their moderate heat. Moreover, the disease and sickness changeth his place and entereth—though it be not precisely marked,—into the dog which, to be no untruth, experience can testify. For this species of dog sometimes falls sick, and sometimes dies without any harm outwardly enforced.

That dogs sometimes die is sufficient proof that they are of service to the sick. Please be good enough to remember that this same Dr. Caius, is the one who was the founder of the College in Cambridge which bears his name.

The modern operation of skin grafting was overshadowed by an Italian whose name is revered by surgeons today, as being the inventor of a method of engrafting new noses on old faces. The necessity for such work was more pressing in those days as a frequent punishment was to cut off noses and ears. The graft for the new nose is obtained from the arm of the patient. When first proposed it was commonly supposed that the graft was obtained from the hindmost extremity of a well paid martyr, and so strong was the sympathy between the nose and the parent stock that when the martyr died, the nose fell off. The homeopathic idea—like cures like—is older than the name, for we find an Italian surgeon, one Phioravanti, in 1580, advising the following: "The reason why white of egg is to be used in mixing applications for wounds is because the white is that part which produces the flesh, the skin, and the feathers of the hen, while the yolk engendereth only the intestines. Therefore the white is like unto flesh, and its special business is to produce it." This idea of using the white of egg exactly for the same reason has come into vogue in the past thirty years, and has been used successfully in place of flakes of skin in skin grafting. That like cures like, we have a different phase put on the matter by some of the old Irish physicians, who adapted the color of medicines to the color of the disease. For example, a remedy for jaundice is a yellow medicine, as saffron, tumeric, sulphur and even yellow soap. Unfortunately for this theory we have not been able to find a cure for the blues.

It is interesting, in this relation, to recall the reason why barber poles are red, white, and blue. The design comes from the habit of bleeding, the white representing the fillet or band, the red the arterial, and the blue the venous blood. In the old days bleeding was very much in vogue and usually done by barbers. People were bled for indigestion, for almost every ailment, before taking a journey, at the end of the same, before making a will—a wise precaution on the part of the medical adviser—in fact any event of importance was often preceded by the important custom of bleeding. And in the XVIII. century in the hard drinking days of George the III., when full-bodied claret, port, and rum were consumed in enormous quantities, the practice had much to commend itself. Advertisements may be found in papers of 1701, that “at Hummins’s, in Covent Garden, one might sweat in the cleanest and be cupped in the newest manner.” A man named Radcliffe, in 1703, had an attack of pleurisy, which nearly cost him his life. Bernard, the sergeant-surgeon bled him to the amount of one hundred ounces, or six pounds weight of blood, and checked the disease. The poorer class of physicians used to make a practice of being present at the drawing of the prizes at the lotteries at Guildhall, in case the sudden announcement of winning would have an overpowering effect on the holder of the ticket. The charge for cupping was high,—5 shillings, 6 pence.

Thomas Dover, from whom we derive our familiar Dover’s powder, was an ardent admirer and advocate of cupping. He thus described a cure of consumption in 1733:

One, Mr. William Masters, an eminent surgeon at Evesham, in Worcestershire, was so far gone in a consumption that he was not able to stand alone. I advised him by all means to lose six ounces of blood every day for a fortnight, *if he live so long*; then every other day, then every third day and fifth day for the same time. This was in the month of November. The March following, he rode from Evasham to Bristol in one day, which is forty-seven long miles, to give me thanks for his recovery. He lived many years after.

Dover was a curious character, living in Bristol, England, where he followed the occupation of physician and apothecary. When business was dull he would fit out a privateer and sail to the Spanish Main and replenish his empty purse, and no doubt found buccaneering more profitable and more exhilarating than medicine. To show the decrease in the practice of bleeding, we may say that in 1839 more than one million leeches were consumed in the Paris hospitals alone, while forty years afterward the annual supply was less than fifty thousand.

Medical enthusiasms are not new by any means. Let us see how mercury was administered in 1732. One of the most ardent champions of crude mercury is our friend, pirate, buccaneer, surgeon, apothecary, Thomas Dover. Crude mercury was a panacea, and many persons without consultations swallowed an ounce of mercury, twice a day for weeks. In a letter dated 1723, a gentleman who was a confirmed dyspeptic, wrote that after a course of treatment he found himself "in a pretty good state of health." An actor named Booth had jaundice and an intermittent fever, and he resolved to place himself under the care of Dover. I quote: "the doctor assured him that the crude mercury would not only prevent the return of his fever, but effectually cure him of all his complaints." There was no mistake in the prognosis. "On the 4th of May he began a mercurial course as directed "and by Tuesday the 8th of May (in four days time)" he had taken within two ounces, two pounds weight of crude mercury. He now began to complain of very great pain and general uneasiness under which he suffered. "He could not remain in the same posture one moment." His wife called in another physician who "ordered nine ounces of blood to be drawn from the jugular vein." In the evening "a cordial mixture" was administered—probably Sir Walter Raleigh's Cordial. The next day the headache still continuing, an epispassic was laid over the scalp and an emulsion prescribed. That night Mr. Booth died. This will afford a very good idea of the treatment in the early part of the XVII. century.

A large number of our English ancestors suffered greatly from apoplexy,—which we have shown was treated so well by bleeding—and from calculus or stone. A certain nostrum prepared by Mr. Stephen—it will be seen that Mrs. Winslow had her prototype—was largely used as a solvent. A certain Dr. Hartley was its most enthusiastic advocate and he published a number of pamphlets on its efficacy. Yet his endorsement and faith, alas! were shaken as he himself died of calculus after taking over two hundred pounds weight of soap, which was largely the base of the so-called solvent. That the inventors or originators of medical specifics often die from the same diseases which they guarantee to cure is well known. Lydia Pinkham is said to have died from the same diseases which we are assured she cured. A certain so-called cancer specialist in Buffalo, who professed to cure cancers, died from that disease.

One would think that our old gentlemen after diagnosing the condition by the color, and prescribing crude mercury by the pound, would be a bit chary about the prognosis. Not a bit of it, for we are told by the Irish practitioners how to foretell the ter-

mination of a fever: "Take a black cock, split him open and, while the halves are still hot apply the two halves to the patient. Should they stick on, the patient will recover, but should the pieces fall to the ground, death is certain." In certain parts of England today, when a child is born with a rupture, an ash tree is split and the child is passed through the opening. If the tree unites or heals, so will the rupture unite, hence the child will be well. But how slow and cumbersome a method to wait until trees grow. Listen to this. Culpepper says: "Number the days from the twenty-sixth of June, to the day when the party first began to fall sick, and divide the number by three; if one remain, he will be long sick; if two he will die; if none he will quickly recover."

We may laugh at this crude way of ascertaining the end of a sickness, but at that time possibly we could excuse such methods. Today there are a number of people who should know better and whose manner of living certainly justifies one in believing that they have some intelligence, yet they consult a humbug on East Eagle Street.

I learned the following from a patient who was shot in the chest. His wife not content with the hospital's treatment went down to see this female quack and came breathlessly back with a piece of old newspaper, on which was scrawled, "the bullet is between the lining of the lung and the covering of the heart." The ball was taken from his shoulder.

It has been said that dental surgery dates back and was made fashionable by royalty, as the Princess Mary—better known as Bloody Mary,—caught cold at the lying-in-state of Queen Jane, at Hampton Court Chapel, and the cold settling in her face necessitated the removal of one of her teeth. Should you have a toothache let me assist you in the Irish way: the tooth of a dead horse or the hand of a dead man rubbed into the jaw will be found efficacious, or should the whole side of the face ache, try this: "Drink water from a human skull or take a pinch of tobacco from the priest's pipe and put it in your mouth; then kneel down and say a Pater or an Ave and you will have no more toothache as long as you live." Christian science again. As many people today believe that the efficacy of medicine is in direct proportion to its evil taste or odor, so in the older days. Today in the South we often hear from the negro, "that's right powerful medicine, Doctor." Acting on this supposition we find remedies which would please the most exacting taste. Those who go to the apothecary's and chafe at the delay at the filling of prescriptions should consider yourselves fortunate that the physician did not prescribe "bees prepared in winter," or

"four or five ounces of peach kernals in the spring." At times a prescription called for parrots tongues, hawks livers, and "you need not stare," our informant writes, "if your bill amounts to pounds sterling." A very expensive remedy was unicorn's horn, which sold in the XVII. century for £24 sterling an ounce. A Dr. Hodges administered it to some patients afflicted with the plague, but did not get as satisfactory results as he did with troches of vipers, while troches made from the rattlesnake were more stimulating and better; and today rattlesnake oil is not an uncommon remedy in many regions.

Here is a cure for gout from a learned gentleman who flourished in 1659:

Take a young puppy, all one color-mark, if you can get such a one, and cut him through the back alive and lay one side hot to the given place, the inside I mean." Again, here are some Irish cures, this for whooping cough: "Put a live trout in the child's mouth, fasting. Then put it back alive in the stream. If a trout cannot be had, a frog may be tried." For mumps: "Tie a halter around the child's neck and lead him to a brook and bathe him, dipping him three times in the name of the Trinity." For foreign bodies here is a charm that has more benefits than the Röntgen rays, as one always can use it. I quote from Amidenus who lived in the VI. century: "Bone, as Jesus Christ caused Lazarus to come out of the grave, as Jonah came out of the whale's belly, come out!"

A standard remedy, but one which was rather expensive, was the oil of kittens. This was prepared by boiling live kittens, coats and all, in olive oil. This subtle combination went by the name of *oleum cattalorum* and it took Ambroise Paré two years of hard work and a large sum of money to get the formula from a Florentine surgeon. Lest this provoke too much derision, I beg to call attention to the fact that a tincture which we use to-day called Warburg's, has as one of its principal ingredients dried bellies of skunks. Means to promote anesthesia was the ideal sought by all men for centuries and various methods were in use to lessen the sensibility to pain. In a book called "The Physicians of Middvai," published in the XIII. century, a chapter is devoted to producing anesthesia.

Take the juice of the poppy, orpine, eringo, mandrake, ground ivy, hemlock and lettuce, equal parts. Let clean earth be mixed with them and a potion prepared, then without doubt the patient will sleep. When you are prepared to operate upon the patient, direct that he shall avoid sleep as long as he can and then let some of the potion be poured into his nostrils, and he will sleep without

fail. When you wish to awake him, let a sponge be pounded in vinegar and put in his nostrils. If you wish that he should not wake for four days, get a pennyweight of wax from a dog's ear and the same quantity of pitch; administer it to the patient and he will sleep.

The same gentleman who cured gout with puppies advises this for swellings:

Mark where a swine rubs himself, then cut off a piece of the wood, and rub any swollen place with it and it will help it; with this proviso, that where the hog rubs his head, it helps the swellings of the head, and where the neck, those of the neck. If you cannot apply a part of the thing the hog rubbed against, to the grievous place, you must apply the grieved place to that.

A quack of two hundred years back had a plaister good for green wounds, old fistulas, and ulcers, pains and aches in the head, limbs and elsewhere, as well as a sovereign remedy for contusions, tumours, king's evil, sprains, fractures, dislocations or hurts inflicted either by sword, cane, or gunshot, knife, saw or hatchet, hammer, nail or tender hook, fireblast or gunpowder. He also had a cordial, which while it strengthened the heart and promoted the appetite, proved also a sovereign remedy against worms, as well as a delightful dentrifice. While this was printed 200 years ago, yet we could name half a dozen advertisements with very similar wording and assurances to cure as diverse a number of diseases. The present advertisements of quack medicines all have testimonials attached, but they do not have the true ring when compared with these. I present a specimen in vogue at that period:

Trinity College, near Dublin, March 7, 1684.

Though the art, experience and reputation of Mr. William Read, practitioner of physic, chirurgy, and a great oculist, be sufficiently known in England and Scotland, where he has long exercised his skill with very good success; yet since he has but lately come into His Majesty's kingdom and has desired our testimonial concerning his performances here, we do certify, that he has done several remarkable cures with great dexterity and success; as the couching of cataracts, cutting off cancerated breasts, mortified arms and legs (and very little effusion of blood, by virtue of his excellent styptic water), several of which operations we have, with very much satisfaction, ourselves seen him perform, as we do testify under our hands and seals, the day and year above written.

Signed: Narcissus (Lord Bishop of Ferns) and Leighton; Robert Huntington, Provost; Allen Mullin, M.D.

This same William Read was knighted by Queen Anne in token of his marvelous work in medicine. That there have been hundreds of scalawags of the Antonius order, we find this delightful reminder:

As it would be no less disrespectful than injurious to the public to conceal the merits of Mr. Grant, oculist, therefore we, the minister, churchwardens, and overseers of the Parish of St. Mary, Newington Butts, do hereby certify, that William Jones of the said parish, aged twenty years, who was born blind, on his application to Mr. Grant the aforesaid, who dwells in the St. Christopher's Court, behind the Royal Exchange, by the Blessing of God, in the skilful hand of Mr. Grant, the said Jones, in five minutes time, was brought to see, and at this time, hath his sight very well. This case being so particularly remarkable, and gratisly performed, we do, therefore, give this public testimony, under our hands, this 25th of July, 1709.

Minister,

WILLIAM TASWELL.

Churchwardens,

JAMES COMBER,

WILLIAM DALE.

Overseers,

FRANCIS TROSSE,

WILLIAM BENSKIN,

WALKER WOOD,

JOHN SHIP.

Charms have always occupied a prominent place in the cure of disease from time immemorial. A ring made from the hinge of a coffin had the power to relieve cramps, which were also cured when a rusty sword was hung by the patient's bedside. To cure toothache, in addition to the many I have reported already, a nail driven into an oak tree was a preventive. A halter which had served to hang a criminal, when bound around the temples, was an infallible remedy for headache. The moss growing on a human skull, when dried and pulverised and taken as a snuff was another headache cure. A dead man's hand could dispel tumors of the glands by stroking the parts nine times; but the hand of a man who had been cut down from a gallows's tree was infinitely more efficacious. To cure warts, the best thing was to steal a piece of meat from the butcher, with which the warts were rubbed and the meat buried. As the process of decomposition went on, the warts would wither and disappear. The chips of the gallows on which several persons had been hanged were an excellent cure for the ague. The nightmare, which was supposed to be caused by supernatural agency, was banished by means of a stone with a hole in it, being suspended at the head of the sufferer's bed. This last named remedy went by the name of "hagstone," because "it prevented the witches, who, of course, brought the mischief, from sitting on

the patient's stomach." (Everitt.) I know of several men who carry horse chestnuts in their pockets to ward off rheumatism.

This interesting bit of information, clipped from a recent edition of the *Buffalo Express*, will be appreciated, I am sure:

MADSTONE MAKES A RECORD.

Newcastle (Ind.) corr. *Indianapolis News*.

The Bundy madstone has just completed the longest record of clinging known in its history. The case was that of Mrs. A. Silcox of Attica, O., who was bitten by a dog last January. The stone clung to the wound for 234 hours. Beside drawing out the poison caused by the bite, it drew from the wound a quantity of arsenic administered by the physicians to counteract hydrophobia. Homer Bell of Muncie is now under treatment and three cases are in waiting.

The power of rings to cure diseases of the mind, body, and heart comes to us with a most venerable pedigree. To endow them with peculiar virtue elaborate ceremonies had to be observed. The mode in which the rings received their peculiar healing virtues is described in *An Ancient Book of Ceremonials of the Kings of England*. The ceremony seems to have been usually performed on Good Friday, or some other day set apart for devotional purpose, we are told.

The King would come to his chapel or closet with his lords, without any sword being borne before him, as was usual in other public ceremonies, and there he waited until the bishop and dean had brought the crucifixe out of the vestrie and laide it upon the cushion before the High Altar. It was then the duty of the ussher to lay a carpet for the Kinge to creepe to the crosse upon, and that done a form was sett upon the carpett before the crucifixe and a cushion laid upon it, for the Kinge to kneel upon, and the Master of the Jewell House was to stand ready with the crampe-rings in a basin of silver, while the clerk of the closet also waited with the book concerning the hal-lowing of the crampe rings, the almoner at the same time kneeling on the right hand of the Kinge, holding the sayd booke. When that is done, the Kinge shall rise and go to the Altar, wheare a gentleman ussher shall be redie with a cushion for the Kinge to kneel upon. And then the greatest of Lords that shal be ther to take the basin with the rings, and beare them after the Kinge, to offer. (Everitt.)

Surely with such ceremony the rings should have miraculous power. How many persons today are wearing rheumatic rings? How many declare that since wearing such rings they have been free from pain? A commoner example of the efficacy, which rings have in the mind of people, is the ordinary marriage ring.

Why was such an emblem adopted, signifying all that it does, were it not that the wearing of rings was primarily based upon superstition and charm?

If time permitted it might prove of interest to give some idea of the importance with which spitting was looked upon and how it has been brought down to various ceremonies and functions of today. I may say that in former times spittle was used in baptism and in many of the daily transactions of life, either as a lucky or confirmatory act. Even today, in Ireland, no bargain is concluded at a fair or market till the seller lays the money in his hand and spits on it. It has been employed in medicine and for a perfect result, the saliva should be used after a fasting, especially after a black fast, when the person has not even taken water. It is effectual for chapped lips, when mixed with dust and applied in the name of the Trinity. 'Tis a specific for warts, as I can testify to! For ague if one spits on a spider,—a small living spider,—then rolls it in a cobweb and puts in a lump of butter and swallows it, it cannot be surpassed.

Having told how to treat the various diseases and given many hints on prognosis and medicines, some information to those members of the medical profession who are here, no doubt, will be of interest. I will tell how to acquire a practice. I can do no better than to quote from an author in the early part of last century:

To visit the opera frequently, and be careful to instruct the messengers, when the performance was over, to loudly vociferate for your carriage. This is an effectual way of making you known as a London physician and a man of fashion. Be regular in your attendance at church; and instruct your servant to call you out occasionally during the service when you first start in practice. It will be of service if you can persuade your carriage friends to call often at your house. Always contrive to have a coach standing at your door on Sunday, as it is sure to attract the notice of the people as they return from church, and lead the public to believe that you are a practising physician.

The practice of being called from the theatre is as old as can be and seems to have been first put in vogue by a certain Dr. Kennedy of Nassua Street, Soho, who flourished toward the close of the XVII. century. I quote from Everitt:

Three nights of the week, at least during the playgoing season, the doctor was to be seen in the boxes of the Drury Lane or Covent Garden, and the doctor though an ostensible spectator was, himself, the principal performer in a farce of his own invention, in which the performers were three in number,—himself and two hired retainers. One of the latter would present him-

self at the house at which he knew the doctor was not present and dressed in a smart livery, he would call loudly for "Dr. Kennedy." The other rascal would then rush into the theatre at which the physician was present and bawl the name of "Dr. Kennedy" in stentorian tones. It was part of the performance that the doctor should then rise, and taking his hat and professional cane, depart bowing apologetically right and left, as he quitted the house. The performance though frequently repeated, drew attention and admiration. "Bless me," the great people would soliloquize, as the doctor intended that they should, "that Dr. Kennedy would seem to have half the patients in the town."

Do you not know some Dr. Kennedys in Buffalo?

It would seem from what has been said that we are not so far advanced after all, with our feather beds, our superstition about killing dogs that bite us, our Warburg tinctures with dried bellies of skunks, our rheumatic rings, our habit of carrying horse chestnuts in our pockets to ward off disease, and lastly, that pernicious fad, which is the outgrowth of charms, and amulets, Christian Science.

481 FRANKLIN STREET.

A Theoretical Note on the Vital and Toxic Theories of Cancer, and their Bearing on the Parasitic Theory.¹

By G. H. A. CLOWES, Ph. D., Buffalo, N. Y.

Of the Gratwick Research Laboratory University of Buffalo.

THE theory recently has been advanced in several prominent publications, that the proliferation of the cells of malignant tumors may be attributed to the action either of toxins, or of chemical bodies resulting from abnormal cell metabolism. This statement usually is made without further qualification, leaving the reader to form his own opinion regarding the exact nature of the reaction involved. It must, however, be borne in mind that a toxin or chemical body capable of producing the results observed in cancer could scarcely be the product of the normal or abnormal metabolism of human cells, without the intervention of some external agency; and it is with the intention of showing that the phenomena in question most readily may be attributed to the intervention of some form of parasite, that a few points worthy of interest will be briefly considered.

If we are willing to assume, and it scarcely can be doubted in view of the existing evidence, that some toxic or chemical

1. Abstracted by the author from the report of the chemical department of the New York State Cancer Laboratory, presented to the Legislature, January, 1903.

body plays an important role in causing the cells of malignant tumors to proliferate, the question may well be asked, from what source is this body derived and how does it exert its specific action on the cell? Three possible alternatives may be considered.

1. Some interference with its normal function gives rise to the production within the cell of a toxin or chemical body, capable of exerting a specific action upon the cell, and thereby stimulating it to abnormal development.

2. Some toxin generated possibly at a considerable distance from the point at which the tumor commences, but possessed of an affinity for that particular type of cell, is absorbed by the latter and stimulates it to proliferate.

3. A parasite infecting the cell and itself proliferating and producing a toxin capable of exerting an irritating action on the host cell, causes the latter to proliferate.

The first and second alternatives may readily be disposed of in view of the following facts: a toxin can never, so far as we know, reproduce itself or aid in its own reproduction. It either produces no results, or it exerts a more or less pronounced action upon the cell exposed to it; if that action is too great for the cell to overcome, the latter succumbs; if, on the contrary, the cell is capable of counteracting its toxic activity, an anti-toxin probably will be produced. A similar line of reasoning applies to the action of a simple chemical body which is capable of exerting a poisonous action. It reacts with those groups in the cell protoplasm for which it possesses the maximum affinity, and if the quantity introduced is sufficient the cell is destroyed. If this is not the case, the chemical body in question, together with those portions of the protoplasm which have been disturbed by its action, is removed in the ordinary course of cellular metabolism; and unless a fresh supply of the same body is introduced in continually increasing quantities the stimulation of the cell by this means ceases.

In view of these facts it is evident that even were it possible for a toxin or chemical body, produced under abnormal conditions within the cell itself, to stimulate the latter sufficiently to bring about proliferation, which is highly improbable, the body in question would rapidly become exhausted, or at least diluted to such an extent as to render further proliferation under its influence out of the question. As was stated above, such bodies are quite incapable of helping to reproduce themselves; the reverse rather would be expected. One is therefore, in order to uphold the possibility of the first alternative mentioned above,

forced to the conclusion that the fresh cells derived from the original cell which first proliferated, have inherited the power of reproducing within themselves a stimulating agent, toxic or otherwise, under whose influence they themselves may subsequently be forced to undergo further proliferation. Such an assumption is quite unwarranted. No analogy for any such action exists in nature, and any such theory may be summarily dismissed, in view of the fact that the principal difficulty which it presents, that is, the source of supply of the ever increasing quantities of toxic material required to stimulate the increasing number of tumor cells, may so readily be explained by assuming the presence of a parasite, as will be shown later.

A second alternative, that the toxin in question is produced in an entirely different portion of the body from that in which the particular cells involved are located, may also be disposed of by means of similar arguments. It must be borne in mind that this toxin would have to exert a selective action, having an affinity for one particular type of cells, but why then should it select any one particular cell, or, having selected that cell, why should it further show a preference for the derivatives of that particular cell after repeated proliferation has taken place? And, as stated in the argument brought against the possible production of a toxin or chemical body within the cell itself, it is quite inconceivable that such a body introduced from without should lead to the continuous reproduction of itself within the cell in question, and its derivatives. It is, on the contrary, highly probable that an antitoxin or antibody would be produced, or that the cells would become so accustomed to its action as to be less readily stimulated to proliferation than the surrounding cells of the same species.

From these considerations it will be seen that when the cell undergoes subdivision in order to counteract the influence of any poisonous body to the action of which it may be exposed, it is improbable that the derivatives of that cell should be endowed with the faculty of reproducing that particular type of poison and thus become stimulated to further reproduction, or that they should be more susceptible to that particular poison than the surrounding cells of the same type. The opposite result would be expected in both cases. The fact that Loeb¹ succeeded in inducing artificial parthenogenesis by means of certain salt solutions can scarcely be put forward as an argument in favor of the assumption that the cancer cell might be led to proliferate in a similar manner. In any case the cause of the increase in concentration of certain ions and the osmotic pressure, as well as

1. Loeb. *Am. Jour. of Physiology*, Vol. IV., 1901. Artificial Parthenogenesis, etc.

the marked selective activity exhibited would still present considerable difficulties.

The third and only explanation of proliferation of the cells of malignant tumors as being due to the action of some toxic body, which seems to be in any way borne out by the facts with which we are acquainted, is that the cell in question has become infected with some type of parasite which itself proliferates and produces toxins which, in their turn, react upon the host cell stimulating the latter to undergo subdivision. It must be borne in mind that the reaction taking place under such circumstances between the host cell and the parasite which has been introduced, is one in which the excreta of the parasite play a very important part. Soluble products of this nature emanating from the parasite may be supposed to exert a prejudicial effect upon the forces normally possessed by the cell, whereby the latter is enabled to destroy and assimilate or eject foreign bodies finding their way into its protoplasm. The parasite is thus indirectly protected, and, being once established, naturally proliferates and its excreta and the toxins which it probably produces may be supposed to so stimulate the host cell that the latter undergoes subdivision, whereby the number of parasites per cell and consequently the concentration of toxins is diminished.

It then becomes a question of the relative speed at which parasite and host cell proliferate and the relative toxic effect which they exert on one another, as to which of the three following alternatives takes place: (1) the host cell by continual proliferation eventually destroys the invader; (2) owing to a uniform and continuous subdivision, both of host cell and parasite, an exact condition of equilibrium is maintained, at any rate, for a time; (3) the parasite succeeds in entirely exhausting the cell, in which case the parasite would in all probability form some type of permanent spore which would no longer produce toxins capable of affecting the surrounding tissue. For such a mode of procedure we have a good analogy in the case of certain forms of paramecia, which, on becoming infected by lower types of parasites, proliferate and in that way are often enabled to recover from the infection. (See Metchnikoff, *L'Immunité*, page 20.)

Another rather ingenious but extremely far-fetched suggestion, is that made by Foulerton,¹ who attempts to account for the proliferation of epithelial cells by assuming that up to that point the cells in question have been restrained in their natural tendency to develop, by the function of some antibody induced by reactive materials, which are continually passing into the

1. *The Practitioner*, Vol. LXIX., Nos. 1 and 2, 1902.

system from organs undergoing degeneration. This line of argument is so involved and introduces so many assumptions for which we have no analogy, that it is hardly necessary to consider it in comparison with the much simpler explanation of toxic activity, previously referred to in connection with the parasitic theory. It is, however, the writer's intention to treat this subject more fully at a later period.

In dealing with the problem of abnormal cell metabolism found in cancer, one important point must be borne in mind: the work of numerous investigators who have attempted to discover the cause of cancer has, at least, shown that the question regarding the existence or nonexistence of a parasite as the prime factor in this disease, is one which can never be decided, making use of generally accepted bacteriological principles. In just the same way it is necessary to deal with the physiological chemical phase of this subject, in an entirely different manner to that which has proved itself so satisfactory in those cases in which only bacteria and their products are involved. It is not, however, proposed to go further into this subject in the present paper.

Summary.—An attempt has been made to show that the parasitic theory of the origin of cancer is not in any sense incompatible with the various toxic or chemical theories; in fact, that the production of the toxins generally recognised as playing an important part in this disease, may most readily be attributed to the introduction of some form of intracellular parasite which, on infecting the cell, proliferates, produces toxins and then indirectly stimulates the host cell to proliferation. This theory suggests an explanation for:

1. The production in ever increasing quantities of some body capable of stimulating the cancer cell to enormous proliferation.
2. The selective action displayed by this body for one particular cell, and the direct descendants of that cell, to the exclusion of others of the same type.
3. The apparent impossibility of infecting healthy individuals with the blood of cancer patients, but only by means of intact cells.

It may also be said that this line of reasoning is in accord with the findings of those who have investigated tumors with a view to discover some form of parasite. In conclusion it may be said that the publication of this paper is due to a desire on the part of the writer to check, if possible, the tendency of some authors to advance vague chemical or toxic theories in explanation of the origin of cancer, in lieu of something more specific.

The Medical and Surgical Treatment of Bright's Disease.¹

By CHARLES SHERMAN JEWETT, M.D., Buffalo, N.Y.

THE innumerable attempts to classify satisfactorily the various pathological conditions, which together are known as Bright's disease, have tended toward hopeless confusion rather than toward simplification of our ideas upon this subject. For the purposes of this paper, in the interest of brevity and clearness, and to avoid tiresome repetition, I shall omit all consideration of acute and chronic congestion, acute and chronic degeneration and amyloid degeneration of the kidney, and consider the topic under three general heads:

1. Acute nephritis.
2. Chronic diffuse nephritis with exudation, (chronic desquamative nephritis, chronic tubal nephritis or chronic parenchymatous nephritis).
3. Chronic diffuse nephritis without exudation, (chronic interstitial nephritis, cirrhosis of the kidney, contracted kidney, granular kidney).

In the treatment of acute nephritis we should aim to relieve the congestion and inflammation of the kidneys, to rest these organs as regards their excretory functions, to keep the tubules free but without irritation of the kidney structure, and to meet symptoms as they arise. At the onset of acute nephritis, the patient should be put to bed in a warm room (70 degrees to 74 degrees F.); he should have flannel or cotton flannel next the skin, and should lie between woolen blankets. The diet should be liquid, and small in amount, while it may be advisable to withhold all food for the first day or two. In this form of Bright's disease it seems to be universally agreed that an absolute milk diet is best, except only in those cases where milk causes digestive disturbances. If these cannot be otherwise relieved and dilution with lime-water or the use of skim milk fails, we may be forced to the use of weak gruels of arrow-root or barley, or of beef tea, or of chicken broth. It is well to continue the absolute milk diet well into convalescence after both albumin and casts have disappeared from the urine. From the outset large quantities of water or of some alkaline mineral water should be given, and it is best to administer them hot.

For the relief of renal congestion purges, diaphoretic measures, and local applications are to be employed. Hydragogue cathartics and salines are to be given at once and the bowels should be kept active throughout the disease. To promote sweating we may

1. Read before the Section on Medicine, Buffalo Academy of Medicine, May 13, 1903.

use the hot tub bath, the hot air bath, a combination of both, or the hot wet pack. While using these measures hot drinks may be given freely. Should all these means fail, we must consider the advisability of giving pilocarpin subcutaneously. This drug is to be given only with extreme caution and its effects carefully watched. It may be administered with strychnine or digitalis to counteract its depressant action. The sweating induced by pilocarpin may be increased and prolonged by hydrotherapy. The sweating process should be repeated as often as the strength of the patient will permit.

Locally, we may apply hot fomentations or poultices to the loins, covering an area far wider than that occupied by the kidneys. In more severe conditions dry cups, leeches, or wet cups, may be used. Julia, a French author, has reported good results from the local use of an ointment of pilocarpin. High enemata of physiological salt solution at a temperature of 110 degrees F., sometimes act well in relieving renal congestion and promoting diuresis. When there is severe lumbar pain great relief with improvement of all symptoms is said to follow puncture of the kidney. Authorities differ radically as to the use of diuretics in the early stage of this disease, some holding that by relaxing the renal vessels they aggravate the congestion, while others claim that alkaline diuretics, by rendering the urine alkaline, produce solution and loosening of casts and coagulated matter, and thus free the renal tubules from obstruction. Certain it is that water is our best and safest diuretic.

For nausea and vomiting, occurring early in the disease, we should restrict the ingestion of food, and use ice, minute and frequent doses of dilute hydrocyanic or hydrochloric acid, creosote, carbolic acid, tincture of iodine, or the preparations of bismuth. When these symptoms occur at a later stage of the disease they are due to uremia and should be treated by removing their cause. If uremia should develop with headache, restlessness and sleeplessness, the measures already detailed for renal congestion are to be applied, but with increased vigor,—purges, compound jalap powder, croton oil or elaterium, to produce purgation and free diaphoresis. For the high arterial tension we may use chloral, nitroglycerine, sodium nitrite, and possibly morphine. If convulsions supervene they may be controlled by chloroform, while large doses of potassium bromide and chloral are given per rectum, in the hope of preventing their recurrence. In robust, full-blooded patients phlebotomy with the withdrawal of from one to two pints of blood may be of great service.

Regarding the use of morphine to control uremic convulsions, there is a wide divergence of opinion, it being argued on the one

hand that by giving morphine we hinder the elimination of the poison which has caused the convulsions, that we add another poison and that we seriously increase the danger of prolonged and fatal coma. On the other hand it is held that the real danger in convulsions is from the nervous explosion; that where chloroform, chloral and bromides fail, morphine secures rest for the nervous system, gives time for the operation of eliminatives and, finally, that in practice it works well. Osler says that it is indispensable, and he has never noted any bad effects nor any tendency to coma from its use. For the headache and sleeplessness of uremia hyoscine hydrobromate or sulphate, in doses of from 1-200 to 1-100 of a grain, is often of distinct value.

For the dropsy we must use the eliminative measures already detailed to which, after the subsidence of acute symptoms, may be added diuretics. In those cases in which the arterial tension is low or the heart action feeble digitalis, strophanthus, and caffeine are efficient diuretics. When these measures prove ineffective it may be necessary to tap the abdominal or pleural cavities, and this should be done whenever the accumulation of fluid interferes seriously with the respiratory or circulatory functions. Puncture or incision of the skin or the introduction of canulæ into the subcutaneous tissue may in rare cases become necessary to relieve edema, but these operations should be attended with every possible precaution to prevent infection of the wounds. Edema of the glottis or larynx may be treated by steam inhalations, intubation or tracheotomy in case general measures have failed. For cardiac dilatation we may give digitalis, strophanthus, and strychnine. Inflammatory complications should be treated upon general principles.

During convalescence mild preparations of iron and bitter tonics should be given to correct the anemia. The return to full diet should be most gradual and cautious, light farinaceous foods being first allowed, then simple vegetables and fruits, white meats and eggs. Removal to a warm, dry climate is of great value. Chilling of the body surface must be most carefully avoided, and for a long time after apparent recovery occasional examinations of the urine should be made.

CHRONIC DIFFUSE NEPHRITIS WITH EXUDATION.

In this form of Bright's disease the treatment is very similar to that of acute nephritis. If malaria, syphilis, or chronic supuration is operative as a cause, that cause should be attacked by appropriate measures and with the hope of securing marked improvement. We should also seek to prevent the further operation of such causes as are to be found in the patient's surroundings and

habits of life. Thus, withdrawal from business, the forbidding of severe exercise, regulation of diet, inhibition of alcohol, and the choice of a suitable climate, all have their value in appropriate cases.

The diet should be light and simple,—milk and nonnitrogenous foods, and milk exclusively when there is much albuminuria. The bowels should be kept freely active. Occasional doses of calomel seem to be of much value, not only for their cathartic action, but also as promoting diuresis and absorption of the renal exudate through the lymphatics. The skin should receive peculiar care, and woolen underwear should be worn constantly. Frequent hot baths promote cutaneous elimination and other hydrotherapeutic measures are to be used as indicated, while chilling of the surface is to be sedulously avoided.

Among diuretics water is again the stand-by. Strontium lactate is claimed to possess peculiar efficacy and, in selected cases, digitalis, strophanthus, and caffeine are undoubtedly valuable. Anemia is to be treated by the administration of iron. Occasional changes in the preparation used are advisable. The inhalation of oxygen is said to promote metabolism.

High arterial tension is to be opposed by nitroglycerine, while feeble heart action calls for the exhibition of cardiac stimulants. Chronic uremia is best treated by the vigorous use of diaphoretics and diuretics. Where the financial circumstances and the strength of the patient will permit, a permanent or at least a winter residence in a warm, dry climate, such as that of Arizona, or of Southern California, is often advisable and may tend greatly to the prolongation of life and of comfort. For the acute exacerbations and complications the treatment is in all respects that detailed in considering acute nephritis, although the difference of prognosis in the two conditions is ever to be borne in mind.

CHRONIC DIFFUSE NEPHRITIS WITHOUT EXUDATION.

Whenever there is reason to believe that lead, or the poisons of syphilis, malaria or gout, stand in a causal relation to this condition, these poisons should be eliminated or counteracted by appropriate treatment. When no such cause is discoverable our treatment can have but two aims: first, to relieve symptoms, and second, to avert or postpone fatal complications, as uremia, apoplexy and heart exhaustion.

Many cases presenting no local symptoms will call for no medicinal treatment. For this class of patients judicious regulation of the habits of life and proper hygiene are all important. Whenever possible relief from mental strain should be secured. Sudden or severe muscular exertion is to be avoided, while gentle

and regular exercise is of value to promote a healthy circulation and metabolism. Walking is probably the most desirable form of exercise. It is to be remembered that a moderate increase of vascular tension is necessary and conservative in these cases. Too low tension is probably even more dangerous than excessively high tension. The patients should be warmly clothed, should invariably wear woolen underclothing and, when possible, should live in a dry, warm, equable climate, such as that of Southern California, Arizona, Egypt, or Algeria. Sea voyages are often of value.

The diet should be light and abstemious. A strict milk diet is too weakening and, except in acute exacerbations, is usually inadvisable. Yet milk may well form the basis of diet, combined with the simpler watery vegetables, fruits, and farinaceous foods. Cream, butter and other fats are desirable, and meats are commonly allowed, but in great moderation. Concerning the administration of meats, we encounter wide differences of opinion, from the dictum of Benjamin Ward Richardson, that a pure or nearly pure vegetable diet is best, to the old rule, "one meal of flesh, one of fish, and one of neither." The recent discussion before the American Medical Association seemed to show a modern trend toward the more liberal allowance of meat to these patients. Perhaps the amount of uric acid formation may serve as a reliable guide in determining this point for any individual case. Water or the pleasant alkaline mineral waters should be given most liberally.

The condition of the skin should receive careful attention. Cold bathing is to be avoided, but periodical sweating by means of hot baths, hot air, or Turkish baths, is indispensable. The bowels are to be kept freely active, and this can best be done by the use of salines, or of laxative alkaline mineral waters. Renal activity is to be maintained and every seven to ten days the urine of twenty-four hours should be examined, especially with regard to its acidity and to the elimination of urea and uric acid. Excessive acidity may be corrected by small doses of potassium tartrate, or of the potassio-tartrate of sodium. When symptoms begin to develop they are to be dealt with in much the same way as in the other forms of Bright's disease.

Digestive disturbances are treated upon general principles, except when due to uremia, in which case they are only to be relieved through removing their cause. Excessively high arterial tension is to be diminished by the use of nitroglycerine, nitrites, and the iodide of potassium. The last-named drug, while producing less relaxation of the arterioles, has a more lasting effect than nitroglycerine; hence, often may be given continuously for

long periods without disturbance. Where this is not well borne and where nitroglycerine causes headache, tincture of aconite or of veratrum viride, with sweet spirits of nitre, may prove satisfactory. In cases with feeble or dilated heart and low arterial tension digitalis, strophanthus or strychnine is indicated.

For anemia it is customary to give iron preparations, although Tyson claims that in cases of contracted kidney they do far more harm than good. Wier Mitchell, on the other hand, gives from one-half to one dram of the tincture of the perchloride three times daily, holding that this large dosage is of value, both for the anemia and to diminish arterial tension.

Dropsy is to be treated by vigorous purging, sweating, and diuresis,—the alkaline diuretics being here of undeniable value. Eventually, tapping of the great cavities of the body will often be found necessary, but acupuncture and incisions of the skin, as heretofore mentioned, should, if possible, be avoided on account of the great danger of infection.

When uremia threatens we may use purges, diaphoretics, diuretics and nitroglycerine. The withdrawal of twelve to twenty ounces of blood, with or without a subsequent infusion of physiological salt solution, will often be followed by satisfactory results. If uremic convulsions occur we may give inhalations of chloroform, and administer chloral by mouth or by rectum. Croton oil is probably the best purge in this condition. Recurrence is to be guarded against by the use of purges, sweating, diuretics, bromides and chloral. For uremic coma we must use vigorous purging, diaphoresis and blood-letting.

When in spite of the use of vasodilators, troublesome headache, restlessness and insomnia occur, they may at times be relieved by bromides, chloral, sulphonal or hyoscine. These measures failing, morphine is our only resource and, in spite of theoretical objections, its administration often seems justifiable and wise. In the terminal stages, with feeble heart action, relaxed vascular tension, deficient renal excretion and increasing dropsy, we must fall back upon cardiac stimulants and diuretics.

SURGICAL TREATMENT.

Today no discussion of the therapy of Bright's disease which fails to consider its operative treatment can be regarded as complete. I, therefore, add a brief review of the history of this treatment. In *The Lancet*, January 4, 1896, Reginald Harrison reported three cases upon which he had operated for the relief of supposed surgical affections of the kidney. In each case the only lesion found was an acute or subacute nephritis, and each was followed by complete recovery. Each operation was unilateral

and Harrison concluded that operation upon one kidney benefited the functional condition of the other.

In the *British Medical Journal*, October 17, of the same year, Harrison proposed incision of the kidney as a treatment in acute suppression of urine, and in acute nephritis with tenderness on pressure over the kidney, with slow disappearance of casts and albumin. In April, 1899, Edebohls reported six cases of nephropexy upon movable kidneys, the seat of chronic nephritis. Favorable results upon the nephritis in cases 1, 4 and 5, led him to undertake the operation in case 6 for the deliberate purpose of favorably influencing or curing the nephritis. He concludes his paper as follows: "My own favorable experience warrants me, for the present, in regarding chronic nephritis affecting a movable kidney as an important indication for nephropexy."

In June, 1899, Ferguson reported two operations, one was for supposed stone in the kidney, but the pathological report showed chronic interstitial nephritis. Decapsulation was followed by cure. The second case was characterised by chronic pain over the right kidney, with acute exacerbations, but without albuminuria. Septic kidney was suspected but not found. Decapsulation was followed by relief of pain. In this paper Ferguson proposed operation for chronic nephritis.

Israel, June 12, 1899, reported fourteen operations upon the kidney, for the treatment of nephralgia or renal colic and of renal hematuria. Of these cases, three died from nephritis, two were failures, in three the symptoms recurred after long intervals, and six completely recovered. In January, 1902, Israel made the following statement regarding his operations:

I have never attempted to cure with the knife, any form of nephritis whatsoever. On the contrary, my intervention had for its sole object the removal of the distressing or dangerous symptoms of colic and profuse hemorrhages arising in connection with nephritis.

Pousson, October 21, 1899, reported three personal cases of operation upon the kidneys in nephritis, and collected 22 cases from the literature. Edebohls, May 4, 1901, published a further paper in which he said:

I am now prepared to go a step farther and propose surgical intervention for the purpose of attempting a cure of chronic nephritis, whether the affected kidney be movable or in place. When the inflamed kidney is not movable, and operative fixation of the organ is, therefore, not indicated, I shall content myself with entirely denuding the kidney of its capsule proper, and thus affording free opportunity for the formation of new

vascular connections, on a large scale, between the bloodvessels of the kidney and those of its fatty capsule.

Harrison, October 19, 1901, reported three additional cases, one of nephrotomy for pain in acute nephritis, one of renal puncture for suppression in acute congestion, and one of incision and drainage for cystic degeneration. Edebohls, December 21, 1901, reported in detail his operations upon nineteen cases of nephritis without mortality. Of these nineteen cases, three disappeared from observation within four to six weeks. In one case (of unilateral nephropexy) no cure resulted. Three years later the opposite kidney was removed, after which the patient lived for five years with only the operated kidney, and died at the end of that time, after undergoing a hysterectomy. Seven cases had been operated upon within less than a year preceding this report and judgment upon them was suspended. The remaining eight cases are reported as cures, having been under observation for periods varying from one year to eight years and four months subsequent to the operation. In seven of these cases the time from operation to the complete disappearance of albumin and casts from the urine, varied from one to twelve months and in one case it was not definitely determined.

In March, 1902, Primrose reported a case of chronic nephritis with albuminuria, hyaline, granular, fatty and epithelial casts, edema, anasarca and ascites. Paracentesis abdominis had been performed nine times. November 21, 1901, the capsule of the right kidney was incised. This was followed by an increased excretion of urine with a lessened percentage of albumin. December 20, 1901, decapsulation of the left kidney was performed. After recovery from a pneumonia, which followed, great improvement in the patient's general condition was observed. Sixty-two days after the second operation the urine contained only a trace of albumin with a few casts, the anemia had nearly disappeared and there was no return of the edema or ascites.

Guiteras, May 17, 1902, reported two operations performed respectively one month and two weeks previously, but he wisely refrains from drawing any deductions from them. In a personal communication dated February 14, 1903, Dr. Guiteras says: "As yet I have drawn no conclusion." He makes no statement of the subsequent history of his two cases.

Edebohls, March 28, 1903, published a further report of his experience. In addition to the nineteen cases already mentioned, he tells of thirty-two others operated upon during the year 1902. These new cases were all far advanced and some of them were operated upon only because the operation was demanded by the

patient, or by his physician. In this latest communication Edebohls summarises the results of all his operations as follows:

Summary of results of renal decapsulation for chronic Bright's disease in the author's fifty-one cases, embracing forty-seven operations upon both kidneys and four operations on one kidney only; seven patients died within seventeen days after operation. Seven patients died at periods after operation, varying between two months and eight years; the average period of life after operation being one year and eight months. Two patients do not show improvement satisfactory in every respect. Twenty-two patients are in various stages of satisfactory improvement and progress toward health, at periods varying between two months and fifteen months after operation. The urine of several of these is at present free from albumin and casts. They have not, however, passed the probationary period of six months of normal urine, before the expiration of which no patient is entitled to a place on the list of cures.

One patient, after a cure extending over a period of four years, again has chronic Bright's disease. One of her kidneys only was operated upon. Nine patients were cured of chronic Bright's disease, and remain cured at periods after operation, varying from one year and nine months to ten years, the average duration of cure being over four years. Three patients disappeared from observation after leaving hospital, and no trace of them can be found.

Through the courtesy of Dr. Eugene Wasdin of the Marine Hospital service, I am permitted to read his condensed report of a case operated upon by him. This report is of unique interest, as containing an account of what I believe to be the first autopsy following the performance of Edebohls's operation:

CHRONIC BRIGHT'S DISEASE, ARTERIOSCLEROSIS, AND MITRAL STENOSIS.

W. K., age 32. History of syphilis for twelve years:

Presented abdominal fluid, great cardiac uneasiness, difficult breathing, urine reduced to 200 c.c. in twenty-four hours; sp. gr., 1.008; albumin, 20 per cent. volume. Although the general condition, contraindicated the operation, it was determined to decoricate the kidneys as a symptomatic measure. The right organ was exposed and the capsule reflected from the cortex over two-thirds of the surface, and the flaps sutured to the muscular walls. Venous hemorrhage was quite free for twenty-four hours. During the first twenty-four hours, the urine increased to 1000 c.c.; sp. gr., 1.008. During the next few days the secretion became greatly increased, 3500 c.c. in twenty-four hours. All symptoms, of course, improved. For two months his condition was such that it was hoped no further operative interference would be

required, but at this time, the general symptoms recommenced, dizziness, headache, and the like. The urine gradually diminished in quantity to 500 c.c.

The left kidney was then decorticated, the organ being left free. Again the amount of urine at once increased to 2500 c.c., and symptoms improved; but, again, there was gradual failure to secrete and the man died of uremic coma.

Autopsy limited to kidneys. The first organ decorticated; the right, presented a firm fibrous envelope closely investing the kidney and forming a very tough capsule that could be removed only with difficulty, and which was very slightly supplied with bloodvessels. The left organ was in process of the same change, the kidney being again invested with a firm, tough membrane, which appeared to compress the organ. To neither kidney was there any newly formed blood supply through adhesions. Kidneys incised showed a chronic interstitial nephritis; the organs much reduced in size, with a number of retention cysts in cortex.

Results of operation in this case,—no results as a curative measure for chronic Bright's disease. Good results as a measure to relieve symptoms of imminent danger from suppressed urine and uremia. Its immediate result is diuretic, the duration of which depends upon reparative changes about the kidney. Contraindications as a curative measure,—any organic change in the organs, capable of causing death *per se*, i.e., arteriosclerosis, heart valve disease, and the like. Cases in which it may be expected to succeed curatively,—in uncomplicated parenchymatous nephritis, and glomerulo-nephritis. To relieve suppression, it should be used in all cases.

I am indebted to Dr. Eugene A. Smith for the opportunity of reporting the following case. Miss H—, age 21, teacher, on April 3, 1902, gave following history:

Two years ago she noticed a swelling of both lower eyelids, which was shortly followed by swelling of the feet and legs; and, finally of the entire body. After persisting for two weeks, the swelling disappeared. During this period the patient complained of severe pain in the left side, with occasional pain in the right side. In September, 1900, she was treated in the hospital for cystitis,—apparently with success. Since then she has had many recurrences of the pain, which was of a cutting character and worse at night. In March, 1902, she had a severe attack of vomiting, with intense pain. Such attacks were frequently repeated for two weeks. After their subsidence, she noticed a swelling of both lower lids, which nearly closed both eyes. April 4, she passed 900 c.c. of smoky acid urine. Sp. gr., 1.010; 9.0 gms. urea, abundant albumin, renal epithelium, hyaline and granular casts. April 21, Dr. Smith decapsulated the left kidney. The operation was undertaken on the probable diagnosis of kid-

ney stone, but an apparently typical large, white kidney was found, and no stone.

The operation was followed by general improvement, and the passing of a largely increased quantity of urine, but the latter contained a large amount of albumin and a goodly number of casts. Two days after the operation, the quantity of urine rose to 1152 c.c., and from then until May 25, the daily quantity varied between 1330 c.c. and 2224 c.c. On July 20, 1902, the quantity was 1500 c.c.; sp. gr., 1015; reaction acid; urea, 13.5 gms. There was a large quantity of albumin, and also hyaline and granular casts, cylindroids, red blood-cells, and leucocytes.

Although the hospital records are somewhat vague upon this point, Dr. Smith informs me that from the time of operation there was a very marked diminution in the quantity of albumin, and that during the entire subsequent period of observation this quantity never approached that which was constantly present before operation.

On February 25, 1903, Dr. Smith's patient was seen again, and the following notes taken:

No headaches, strength good, appetite good, bowels regular, color better,—rosy. Urine usually in good quantity, but sometimes diminished. Feet and legs a good deal swollen each night, as high as the knees; eyelids sometimes puffy. She does considerable work, but tires easily. Has occasional slight pain over hips, but usually free from pain. She exercises freely in open air, but sometimes does so reluctantly.

An examination of a single specimen of urine shows the following: amber color, alkaline, sp. gr., 1.012; considerable albumin, no sugar. The sediment contains hyaline, granular and epithelial casts. In view of the amelioration of all symptoms which followed this operation, Dr. Smith is considering the advisability of decapsulating the other kidney.

Edebohl's explanation of the beneficial effects of decapsulation upon the nephritic kidney, are based upon his observations in three secondary operations upon kidneys, upon which nephropexy had previously been performed. I quote the following:

At the second operation, upon the same kidney, the following conditions were noted as results of the first operation: first, the formation of strong connective tissue adhesions or bands attaching the kidney to its surroundings. Second, the existence in these connective tissue adhesions or bands, of very large and numerous bloodvessels, running between the kidney and the adjacent tissues. This fact was forcibly brought home to my assistants and myself by the necessity of ligating artery after artery of considerable size, in dividing these adhesions. Third, the pre-

dominance in number and size of the newly formed arteries over the newly formed veins. Fourth, the significant fact that in all the arteries the direction of the blood stream was toward the kidney.

The disparity between the conditions here described and those found at the autopsy in Dr. Wasdin's case, is most striking. Three possible explanations of this disparity suggest themselves: first, that Edebohls's secondary operations may have been upon nonnephritic kidneys, in which case we are hardly justified in assuming that the same conditions would necessarily follow the operation for chronic nephritis; second, that after decapsulation for chronic nephritis the anatomical results may vary widely in different cases; third, that in Dr. Wasdin's case the fact that the capsule was reflected but not removed may, in part at least, account for the findings.

The material at hand is as yet insufficient to warrant the formulation of final deductions regarding the operative treatment of Bright's disease. However, in view of the results already attained, I feel that the following tentative conclusions are justifiable.

1. In certain cases of acute nephritis operation may be of use in relieving suppression of urine, pain, or hematuria; it may perhaps hasten recovery and aid in the prevention of chronic nephritis.

2. In hopeless cases of chronic nephritis decapsulation will sometimes relieve distressing symptoms and prolong life.

3. Should the results claimed by Edebohls be duplicated in the practice of various operators, and should the supposed reparative results of his operation be confirmed by future autopsies, then the possibility of operative cure of certain cases of chronic nephritis must be admitted.

892 MAIN STREET.

Clinical Notes on Dysemia.¹

By LOUIS J. GRAVEL, M. D.,

Physician-in-chief to the Hotel Dieu Hospital and chief of the laboratory, Montreal, Canada.

THE word anemia is a misnomer and serves to perpetuate an erroneous idea of the conditions to which it is applied. It had its origin at the time when scientific medicine was in its infancy; before the microscope and other instruments of precision had elucidated the physiology and pathology of the blood

and blood-forming organs. In those days the pallor of the skin and mucous membranes was attributed to "a diminution of the amount of blood," and even at the present day there are physicians who still share in this fallacy. From a pathological standpoint, the chief features of the so-called anemic state, are the morphological and chemical changes in the blood,—its qualitative deterioration. It, therefore, has been suggested that the term dysemia (bad blood) would more closely describe the conditions present. However, a word which has the sanction of usage for so many years cannot be easily displaced, and will probably long survive in medical nomenclature.

There is only one criterion on which to base a diagnosis of dysemia, and that is the changes in the blood. The other symptoms to which much significance was formerly attributed,—pallor of the skin and mucous membranes, rapid pulse, and palpitation, general weakness, vertigo, and the like,—are of doubtful value, since they are present in various conditions in which the state of the blood is normal. Thus, for instance, they may result from purely psychical causes,—fear or anxiety,—or occur in the course of chronic digestive disorders, or neurasthenia.

To estimate the degree of dysemia the diminution in the percentage of hemoglobin is of the greatest importance, and this may range within wide limits, even to one-fifth of the normal proportion. Next in importance is the reduction in the number of red blood corpuscles, which, however, is perceptible only in the more marked cases. In the severe types of the disease reductions to 50 per cent. are quite frequent. There is also a change in size and shape of the red blood-cells, known collectively as poikilocytosis, in the pronounced form of dysemia. Usually the corpuscles are diminished in size and their shape becomes irregular; there may be granular deposits in their protoplasm. Sometimes there may be found in the blood the so-called normoblasts, which are nucleated red cells, resembling those present in the red bone marrow. The latter have been specially observed in dysemia, following profuse losses of blood, but in any case are of no significance.

These remarks apply only to the simple types of dysemia and not to the progressive pernicious forms, characterised by changes in the blood-forming tissues. As pointed out by Ehrlich and Lazarus in an excellent article on this subject, to which I am indebted for much information, the radical difference between the simple and pernicious varieties of dysemia is that in the former the regeneration of blood takes place in a physiological manner, while in the latter it reverts to the embryonic type, as shown by the presence of foreign elements. The majority of cases of simple dysemia are secondary to diseases attended with malassimila-

tion, tissue waste, hemorrhages, and profuse discharges, while it is important to remember that it is often due to a condition of autotoxemia, or to the absorption of toxins generated by bacteria. It is, therefore, not enough to make a diagnosis of dysemia, but the primary cause should be sought and removed if possible.

The treatment of the changed condition of the blood consists in the adoption of an appropriate regimen,—a nutritious dietary, fresh air, and sunshine,—in connection with the administration of iron supplemented occasionally with arsenic. Hydrotherapy is a very valuable auxiliary in some cases. The patient should rest as much as possible, and in severe cases should take a vacation in the mountains. Long before modern hematology had its beginning, iron was administered on empirical grounds, and all that modern medicine has contributed to the therapy of dysemia is the introduction of ferruginous compounds, which are not only superior in efficacy to those in former use, but free from their objectionable features. The chief disadvantages of the older iron preparations were their disturbing effect upon the digestion, their tendency to produce constipation, and their destructive action upon the teeth. It is a notable achievement of pharmaceutical chemistry to place at the physician's disposal organic ferruginous compounds, which approximate closely in composition to the form in which iron is contained in the red blood-globules. The most prominent preparation of this kind is peptomangan (Gude). This consists of iron and manganese in the form of peptonates, which, representing albuminous elements in their last stage of digestion, are immediately absorbed and assimilated, without undergoing any previous transformation in the gastrointestinal tract. The presence of manganese in combination with iron in peptomangan is based upon the fact that both of these elements are found associated in the red globules.

Having had my attention directed to this preparation through the reports of leading authorities in European and American journals, I subjected it to a thorough test in the Hotel Dieu Hospital, Montreal, and have briefly recorded here the histories of a number of typical cases in order to demonstrate its efficiency in dysemia, as shown by the rapid increase of the hemoglobin percentage and number of red blood cells.

Case I.—A woman, aged 25 years; dysemia. Time of administration, 30 days. First count, 3,376,400 red corpuscles to the c.mm.; second count, 4,400,300 to the c.mm. Hemoglobin: first examination, 51 per cent.; second examination, 70 per cent.

Case II.—A girl, aged 20 years; dysemia. Time of administration, 30 days. First count, 2,630,200 red corpuscles to the

c.mm.; second count, 3,970,000 to the c.mm. Hemoglobin: first examination, 40 per cent.; second examination, 60 per cent.

Case III.—A man, aged 25 years; dysemia, following typhoid fever. Time of administration, 30 days. First count, 2,500,200 red corpuscles to the c.mm.; second count, 3,950,000 to the c.mm. Hemoglobin: first examination, 39 per cent.; second examination, 50 per cent.

Case IV.—A woman, aged 39 years; dysemia. Time of administration, 30 days. First count, 2,750,400 red corpuscles to the c.mm.; second count, 3,500,000 to the c.mm. Hemoglobin: first examination, 35 per cent.; second examination, 60 per cent.

Case V.—A woman, aged 35 years; dysemia, following miscarriage. Time of administration, 30 days. First count, 2,800,000 red corpuscles to the c.mm.; second count, 3,300,000 to the c.mm. Hemoglobin: first examination, 33 per cent.; second examination, 45 per cent.

Case VI.—A young girl, aged 17 years; dysemia, following typhoid fever. Time of administration, three weeks. First count, 2,495,270 red corpuscles to the c.mm.; second count, 3,300,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 35 per cent.; second examination, 45 per cent.

Case VII.—A young boy, aged 16 years; dysemia, following typhoid fever. Time of administration, three weeks. First count, 3,670,000 red corpuscles to the c.mm.; second count, 4,600,300 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 65 per cent.

Case VIII.—A man, aged 30 years; dysemia, following amputation of the leg. Time of administration, three weeks. First count, 2,360,400 red corpuscles to the c.mm.; second count, 3,500,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 30 per cent.; second examination, 70 per cent.

Case IX.—Woman, aged 24 years; dysemia, following pneumonia. Time of administration, three weeks. First count, 2,600,250 red corpuscles to the c.mm.; second count, 3,400,000 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 35 per cent.; second examination, 70 per cent.

Case X.—Woman, aged 20 years; dysemia, following miscarriage. Time of administration, three weeks. First count, 2,502,600 red corpuscles to the c.mm.; second count, 4,006,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 65 per cent.

Case XI.—Man, aged 32 years; anemia, following typhoid fever. Time of administration, three weeks. First count, 2,300,-

000 red corpuscles to the c.mm.; second count 3,640,160 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 33 per cent.; second examination, 62 per cent.

Case XII.—A girl, aged 16 years; dysemia. Time of administration, four weeks. First count, 2,290,700 red corpuscles to the c.mm.; second count, 3,800,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 60 per cent.

Case XIII.—A girl, aged 16 years; dysemia. Time of administration, four weeks. First count, 2,430,300 red corpuscles to the c.mm.; second count, 4,000,300 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 65 per cent.

Comparing my results with peptomangan (Gude), with those obtained from other chalybeates of this class, I have been led to give it decided preference. As already stated, the only reliable means of diagnosing dysemia is by the examination of the blood, and for the same reason the only way of testing the efficiency of a ferruginous preparation is by making blood-counts and estimating the percentage of hemoglobin. On the ground of my findings, as shown by the histories of the cases cited, the results of such tests have been uniformly satisfactory and entitle the preparation to a leading place in ferruginous medication.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

Semiannual Meeting, June 9, 1903.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

The eighty-second semiannual meeting of the Medical Society of the County of Erie, was held June 9, 1903, at 10 o'clock a.m., in the Y.M.C.A. parlors, Buffalo; the president, Dr. ERNEST WENDE in the chair.

The minutes of the previous meeting were read and adopted.

Dr. William Warren Potter, chairman of the membership committee, presented the names of Roy G. Strong and William Hobson Heath. They were elected to membership.

The special committee appointed to investigate the matter referred to in the annual report of the board of censors, regarding Dr. C. H. Woodard, reported through its chairman, Dr. John H.

Grant. The secretary of the society read Dr. Woodard's resignation as a member of the society. On motion of Dr. Henry R. Hopkins, the report of the committee and Dr. Woodard's resignation were referred to the board of censors.

Dr. IRVING W. POTTER, chairman of the board of censors, presented the following report:

To the Medical Society of the County of Erie:

The board of censors during the past six months have investigated, upon complaint, the following cases:

Prof. DeNoird doing business in the Ellicott Square building was warned of being in violation of the law in advertising himself as "Doctor," and upon his promising to cease and leave the city, he was not prosecuted. He subsequently left town in accordance with his promise.

Frank Smiseszny, of 81 Mills Street, also promised to stop practising medicine after being told he would be prosecuted if he so continued.

Through the efforts of the *Morning Review*, Antonius J. Weichers was arrested, tried, and convicted in the Supreme Court of conspiracy to defraud, and sentenced to nine months' imprisonment in Erie County Penitentiary. At the request of the district attorney, the censors had the contents of two bottles of medicine given by Antonius to his patients examined by the city chemist, and his report was given to the district attorney for use in the trial.

On March 30, 1903, a Mrs. Tyler made arrangements to open at Concert Hall, and pursue a similar line of work to that done by Antonius. This board engaged I. L. Sherman to gather evidence of what she did, and he has made his report to the board. It appears from this that Mrs. Tyler was backed by Dr. S. H. Warren, who stated that he was the physician in charge of the Tyler Magnetic Sanitarium at 78 Niagara Street. Upon watching Mrs. Tyler for a week Mr. Sherman informed her she would have to stop or she would be arrested and prosecuted. She closed up and no more complaints have been made concerning her.

A complaint was made against S. T. Lee for practising medicine without authority, and upon investigation, the evidence seemed strong enough to convict him. He was arrested and tried in Police Court, but was discharged. This was Mr. Lee's second offense, he previously having been fined \$100.00.

A "Dr." Bridgewater, who followed Antonius in the house where the latter conducted his fraudulent work, and undertook to continue it on similar lines, was arrested, tried, convicted and fined \$50.00 for the illegal practice of medicine. He paid the fine, which, we understand, has been turned over to the treasurer of this society.

This board desires to express its gratitude to the district attorney and his assistants for the manner in which they have at all times aided this society.

We also wish to acknowledge our indebtedness to our counsel, Mr. John Lord O'Brian, for his services, and would respectfully recommend that the board be given authority to draw upon the treasurer for such compensation as the board may approve for payment of counsel, and to meet I. L. Sherman's bill of \$25.00 for service in the Tyler case.

Respectfully submitted,

IRVING W. POTTER, *Chairman.*

FRANCIS E. FRONCZAK,

H. R. HOPKINS.

Buffalo, June 9, 1903.

On motion of Dr. Hopkins the report was adopted and the recommendations therein approved.

Dr. John H. Grant moved that this society request the board of regents of the State of New York to revoke the license of one Dr. Franklin Stuart Temple, who had been associated with Antonius, now serving a sentence in the Erie County Penitentiary. The motion was adopted.

The society then listened to interesting and instructive addresses, as follows: Soul health, by Rev. O. P. Gifford, D.D.; The doctor from the lawyer's standpoint, by John W. Fisher, Esq., of the Buffalo Bar; The physician as an advertising medium, by Willis G. Gregory, M.D., Ph. G.; The physiology of the internal secretions, by F. C. Busch, M.D.

A vote of thanks was tendered the speakers, after which the society adjourned.

Buffalo Academy of Medicine

REPORTED BY F. W. MCGUIRE, M. D., Secretary.

Annual Meeting, June 9, 1903.

The annual meeting of the Buffalo Academy of Medicine was held at the Academy rooms, Public Library Building, Tuesday evening, June 9, 1903.

The president, Dr. HERMAN E. HAYD, called the meeting to order at 9 o'clock p.m.

The minutes of the last annual meeting were read and approved.

The secretary of the academy and of the council presented the following reports for the Academy year of 1902-1903, which were received and on motion ordered to be spread on the minutes.

ANNUAL REPORT OF THE SECRETARY.

The Academy has been unfortunate, during the year, in losing five of its influential members by death,—namely, Thomas Lothrop, Jacob M. Kraus, Herman Mynter, William C. Fritz, and Jacob F. Meyer. The Academy also has lost eight members, dropped for nonpayment of dues, and two by resignation, a total loss of fifteen members. Eight new names have been added.

While there has been a slight decrease of the membership of the Academy, there has been a marked increase in the attendance at its meetings, which can be accounted for easily by the excellent programs prepared by the officers of the different sections.

The average attendance at the meetings has increased from 44 to 55.

During the summer of 1902, a program was prepared for the entire season, and a copy of it sent to each member of the Academy.

There have been five stated meetings. In September, the section of medicine provided the following program: Syphilis of the nervous system, Floyd S. Crego; Cerebral hemorrhage, following injury to the spine, Sydney A. Dunham. The attendance, 28.

In November the surgical section provided the following program: The physics and therapeutic value of the (Röntgen) cathode, and ultra violet rays, with certain references to the electromagnetic theory of light, and exhibition of new instruments for phototherapy, Roswell Park. Attendance, 108.

In January the section of pathology provided the following: Surgical treatment of puerperal infection, Matthew D. Mann. Attendance, 48.

In March the section of ophthalmology supplied the program as follows: A consideration of the value of topical applications to the upper air tract, Frank Whitehill Hinkel. Attendance, 35.

In May the section of obstetrics and gynecology was the provider, as follows: Should the uterus be removed when operating for double pus tubes? Matthew D. Mann. Prophylaxis in obstetrics, Ludwig Schroeter. Attendance, 21.

A special meeting of the Academy was held May 20, at which Professor C. A. Ewald, of Berlin, gave an address on The early diagnosis of gastric cancer. Attendance, 90.

The Council held six meetings during the year, with an average attendance of 10.66.

ANNUAL REPORT OF THE TREASURER.

Current Fund.

Balance on hand, June 17, 1902.....	\$387.37	
Initiation fees seven resident Fellows.....	70.00	
Dues received from Fellows.....	848.00	
Received for use of telephone.....	.40	
Interest, Fidelity Trust Company.....	15.41	
		\$1,321.18

Expenses:

Printing, postage and stationery.....	\$210.73	
Janitor's service, including elevator.....	57.50	
Rent	43.00	
Stereopticon	25.00	
Telephone	19.10	
Repairs to property.....	2.00	
Contribution to Virchow Monument Fund.....	25.00	
Collations	50.00	
Guests' expenses—Medical Section.....	72.90	
Guests' expenses—Surgical Section.....	46.25	
Guests' expenses—Pathological Section (\$62.00 for last year)	162.00	
Guests' expenses—O., L. and O. Section.....	42.00	
Total expenses	\$755.48	
Transferred to permanent fund.....	115.00	
		\$870.48
Balance on hand, June 9, 1903.....		\$450.70
<i>Permanent Fund.</i>		
Amount of fund, June 17, 1902.....	\$1,710.45	
Transferred from current fund.....	115.00	
Interest, Western Savings Bank.....	60.89	
Amount of fund, June 9, 1903.....	\$1,886.34	
Increase of permanent fund in past year, 10 per cent.		
Increase of permanent fund, 1901-02, 22 per cent.		
Increase of permanent fund, 1900-01, 162 per cent.		
Total receipts from all sources during past year.....	\$994.70	
Total expenses	755.48	
Net increase of assets.....		\$239.22

Respectfully submitted,

CHARLES S. JEWETT, *Treasurer.*

June 9, 1903.

REPORT OF THE TRUSTEES OF THE BUFFALO ACADEMY OF MEDICINE
FOR THE OFFICIAL YEAR 1902-3.

To the Fellows of the Buffalo Academy of Medicine:

At the first meeting of the council for the present official term your trustees were charged with the care of the movable property of the Academy for the year 1902-3. Diligent search and inquiry failed to reveal the existence of a list or invoice of these articles. The last annual report of the trustees showed that the property was located in three buildings, viz.: Grosvenor Library, Public Library and new Post Office. The articles were inspected and

were found in excellent condition, with the exception of three armchairs, which were broken; two of the broken chairs were repaired at a cost of one dollar; the third chair was so badly broken that it was not regarded as worth the cost of repairing.

The property in the Grosvenor Library consists of two bookcases, one of which is empty and the other contains the library, bequeathed to the Academy by the late Dr. Frederic C. Bartlett. The library consists of 186 bound volumes and 1,063 unbound periodicals, pamphlets, etc. Several of the bound volumes have passed the century mark in age. The bookcases are in good condition and furnished with locks; the keys are in the hands of the chairman of your board of trustees. At the present time this library does not subserve any utility. The superintendent of the Grosvenor Library has stated that the trustees of that institution are willing to accept the Bartlett library as a gift, and incorporate it with its medical department. It is questionable whether the Academy could rightly and legally make this disposition of it. The bookcases can remain in the basement of the Grosvenor Library building, until the space which they occupy is wanted for some other purpose.

Your trustees have made a catalogue of the library and an invoice of the movable property, which accompany this report.

All the buildings in which the movable property of the Academy is stored are fire-proof. All the movable property belonging to the Academy has lately undergone inspection and has been found in good condition. Each article is stamped with the name of the Academy.

The care of the movable property of the Academy is the only work which has devolved upon your trustees during the year.

Respectfully submitted,

J. W. GROSVENOR,
M. D. MANN,
EUGENE A. SMITH,

Trustees.

[The reports of the secretaries of sections was then presented, but the meetings having been listed in the JOURNAL each month their republication is omitted.]

The Council recommended Dr. A. G. Sage, of 12 Parker Avenue, for resident membership, whereupon he was balloted for and elected to fellowship.

On motion a vote of thanks was tendered to Dr. Jewett for the able and efficient manner in which he managed the financial business of the Academy.

It was moved by Dr. Mann, and seconded by Dr. Benedict, that the books of the Buffalo Pathological Society, now in possession of Dr. H. U. Williams, be turned over to the trustees of the

Academy, with instructions that they deposit them with the Buffalo Historical Society. Carried.

The retiring president, Dr. HERMAN E. HAYD, made a few appropriate remarks about the work of the Academy during the past year and its future needs. He then read his annual address, Fibroid tumors of the uterus.

The auditing committee reported that it had compared the report of the Treasurer with the books and vouchers and found the financial standing to be correct.

The tellers, Drs. Allen A. Jones and F. E. L. Brecht, reported the result of election as follows: president, Joseph W. Grosvenor; secretary, Edwin A. Bowerman; treasurer, Charles Sherman Jewett; trustee for three years, Ludwig Schroeter.

The newly elected officers were duly installed. Each made a few appropriate remarks, thanking the members for the honor extended to them, and pledging themselves to do conscientious work for the Academy. It was moved and seconded that a vote of thanks be tendered to the president, Dr. HERMAN E. HAYD, for his masterly address and his faithful work during the past year. Carried.

On motion a vote of thanks was extended to the secretary, Dr. F. W. McGuire, for his faithful work during his term of office. On motion a vote of thanks was extended to various retiring officers of the Academy, including chairmen and secretaries of the different sections. Carried.

Attendance, 36. Adjourned at 10.15 p.m.

ABSTRACTS.

Enteroclysis and Diarrheas.

Dr. Robert Coleman Kemp (*Manual on Enteroclysis, Hypodermoclysis, and Infusion*), gives an introductory chapter by Dr. William H. Thomson, from which the following is an extract:

Lavage of the invisible cavities of the body in inflammatory states of their lining mucous membrane has justly taken rank among the most effective of modern remedial measures. In the case of the rectum and lower bowel, however, the greatest number of advantageous results follow from this procedure, not only by improvement in local conditions, but still more by effects obtainable through certain physiological relations upon the general circulation, as well as others secured through important nervous associations with contiguous organs. . . . Irrigation with plain hot water, or with normal saline solution, had proved

very distressing, preventing sleep and thereby seriously impairing the general constitutional state, and against this complication I have found no one measure so effective as irrigation after every movement of the bowels. The addition to the water of such an antiseptic and local anodyne as five to ten drops of oleum menthol is also useful. In both acute and chronic colitis, especially the latter, I have often found medicinal remedies fail to complete the cure until they were supplemented by the local effects of this lavage.

In the treatment of cholera infantum, in chronic colitis and various dysenteric conditions, in typhoid fever and in gastrointestinal affections of a catarrhal nature, washing out the lower bowel has become a well-recognised therapeutic measure, and for this purpose there is no better remedy than glycothymoline. Its action is to deplete inflammatory engorgements by exosmosis, increasing capillary circulation and maintaining aseptic cleanliness. When diluted to a 25 per cent. solution, glycothymoline has a saline strength and alkalinity similar to that of blood. It was conceived with the natural constituents of blood and secretions of the mucous membranes in full view. A local application to be successful, must harmonise with the natural fluids of the tissues to be treated. It readily dissolves accumulated mucus, detaching mucous crusts and necrosed tissue. The advantages of glycothymoline in gastrointestinal inflammations seem to consist in its being a nonirritant, antiseptic, and antifermentive remedy without interfering with the normal action of gastric ferments. Its local sedative, anodyne and healing properties, and its power as a nondepressant antipyretic; its depletive action on the congested gastrointestinal mucous membrane contribute in no small degree to the healing process which follows its administration.

Bearing upon this subject, the following cases occurring in the practice of Dr. Willis E. Cummings, of Brooklyn, N. Y., are interesting:

Mary A., 12 years old, gave a history of dysenteric discharges, extending over a period of two weeks. The excreta were very offensive, almost typhoid in character. My usual method of treatment in these cases during the past two years has been to prescribe either liquor bismuth or chalk mixture in combination with a glycothymoline base, but on account of the urgency of the symptoms in this case I flushed out the bowel with glycothymoline, one ounce to the pint of warm water. The effect of this treatment was most marked. The diarrhea was checked within six hours, the pain was less severe and the temperature fell.

Mrs. C., 52 years old, was suffering from a chronic diarrhea of ten years' standing, which gave every evidence of being of a tubercular nature. The usual remedies I had been giving produced no lasting effect. Having found glycothymoline very advantageous in the ordinary summer complaints of children, I made use of it in this case, flushing out the bowel about three times weekly, and giving two drams of the same remedy in half a glass of warm water every four hours during the day, by the mouth. The condition of the patient improved almost immediately, the tenderness and tympanitis disappeared, and in two weeks the patient presented apparently a normal bowel, and steadily gained in weight. This extremely satisfactory result I have decided was due largely to the correction of the fermentative processes, caused by improper secretion of the glands, restoring in a measure the healthful action of the same.

The following prescriptions and methods have been used for sometime, and may be regarded as standard:

Liquor bismuth and glycothymoline, of each, two ounces. Dose, a teaspoonful as often as may be required.

Glycothymoline may be combined with bismuth, tinct. opii camph; tinct. opii; mistura creta; syrup rhei aromatic, and similar medicines.

Administered internally, glycothymoline acts as a carminative, internal antiseptic, alterative, stimulant and antacid, and meets many of the requirements of the physician during the summer months.

Glycothymoline diluted, one ounce to the quart of water, used as a sponge bath, stimulates the skin secretions.

As an enema, glycothymoline, one ounce to the pint, will be found most valuable.

Trikresol in Paraurethral Abscess.

M. L. Heidingsfeld, professor of dermatology, etc., Cincinnati, in a paper read before the North Kentucky Medical Society, November 13, 1902, (*Boston Medical and Surgical Journal*, April 16, 1903), says that many cases of chronic gonorrhea owe their obstinate character and protracted course to the presence of prostatitis, vesiculitis, or cowperitis. But a much larger class owe it to a different and frequently overlooked condition,—an extension of the gonorrheal infection into the numerous small glands, which extensively line the anterior urethra and glans penis and the external and internal surfaces of the prepuce. Their inflammatory and infectious contents are exuded in the form of a molded filament or shred, and often persist long after a urethritis

has subsided and the urine has become clear, producing urine loaded with infectious shreds. Careful palpation will reveal their presence as minute indurations. These so-called paraurethral abscesses often become greatly inflamed and considerably enlarged, varying in size from a pea to a pigeon's egg.

The promptness with which these abscesses refilled when freely incised and drained, and their obstinacy, reminded Dr. Heidingsfeld of the large indurated obstinate abscesses which often complicate severe cases of pustular acne, and incited him to try the method which he is successfully using in the latter affection,—namely, hypodermic injections of minute quantities of trikresol into the heart of the abscess. He has used the preparation in all forms of furuncles and localised abscesses, a single injection often completely aborting them in 24 to 48 hours. Its use was then extended to large abscesses and carbuncles with equally gratifying results, and in one instance he believes he aborted an incipient facial erysipelas by injecting it into its emanating point, a small abscess at the outer angle of the eye.

An ordinary 15-minim glass syringe, which is provided with a retaining screw, is filled with trikresol and armed with a 26-gauge needle; the air is expressed, and the retaining screw run down until the fraction of a minim can be carefully measured by adjusting the retaining screw. The proper dose, a drop the size of a bead sufficient for the smallest abscess, and a minim or more for the larger ones, is then injected into the center of the abscess.

Prof. Heidingsfeld recounts four cases, of which the following history is typical:

H. S., age 27, had several gonorrheal infections during preceding five years. In June, 1901, several abscesses formed along the anterior border of urethra immediately behind the sulcus coronarius; extirpation was performed, but a mild urethritis persisted and became quite active after several months and was again complicated by abscess formation. October 28, 1901, patient had very active urethritis and two circumscribed abscesses, each about the size of a marble, directly under the line of operative incision. Abscesses were incised and freely drained; but gonorrheal urethritis failed to disappear completely. Abscesses again formed, and were excised and drained on December 22. Improvement was only temporary, and when abscesses appeared a third time, February 17, 1902, they were injected with trikresol. Since then abscesses and urethritis have not reappeared.

In all of the four cases trikresol not only effected a complete cure of the abscesses, but materially cut short what were exceedingly obstinate, refractory and unduly prolonged urethrites.

though four cases scarcely afford sufficient experience to determine the full efficiency of the preparation, yet in connection with the marked success which attends its use in analogous conditions, pustular acne and furunculosis, its ease of administration, the absence of any marked distress or serious complication, thoroughly suffices to warrant its use in every accessible case.

Heidingsfeld also used trikresol in an anomalous and obstinate vulvovaginal abscess, with equally gratifying results:

November 8, Miss I. S., presented herself with a vulvovaginal abscess of the left labium, of the size of a pigeon's egg, tender and sensitive to pressure, accompanied with considerable redness and swelling of the adjacent area. The abscess was incised and a considerable quantity of pus escaped, which on microscopic examination revealed ill-defined, poorly-staining, degenerated pus cells, with an abundance of deeply stained characteristic looking intra- and extracellular gonococci. Trikresol injected into center of abscess and an ice-bag applied for twenty-four hours. November 11, patient reported she had experienced scarcely any pain or discomfort from the operation, and that swelling and distress had entirely disappeared. On November 15 the labium had assumed a perfectly normal appearance, and the patient was discharged as cured.

CORRESPONDENCE.

Answers to Correspondents.

RECENTLY there have come addressed to the editor of this JOURNAL, several communications of varying interest, which are here given, care being taken to suppress the names signed, as is done by all well-regulated publications. The answers are written by the reviewer, who gets what he terms "the morgue journals," and who has been driven thereby to a flippancy far beyond his years. The first gem in this unique setting of epistolary literature follows:

BUSINESS SUCCESS.

Esteemed Coworkers:

Our business having grown to such proportions as to demand more commodious quarters, we have bought the three-story building at ——— Boulevard, and would ask you to change our address on your books to that number. Hoping that your publication is equally prosperous, we are,

Very sincerely yours,

Your attention is requested to the markt part of enclosed reprint.

Answer.—We are pleased to learn that your business has grown to such proportions, but we must beg to remind our esteemed co-worker, that our own business is able to sit up and take nourishment, and that we are contemplating the erection of a six-story building, with jade trimmings and a circular storm door for winter use, which we expect to erect on a private boulevard, admission to be by invitation and subscription, which we intend shall be named Rue d'Medicine. Trusting that your publication will become equally prosperous, we are, etc., etc.

P. S.—Your typewriter lady is very careless; we note that she spells marked "markt." If Dr. Gould should see that—but why anticipate! He has troubles of his own just now.

The following from an esteemed fellow editor, requires more space, which is cheerfully given for the sake of the suffering:

MORE BUSINESS SUCCESS.

Fellow Editor:

Greeting—Our fiscal year ends June 30th of each year. At the closing of the books for the year just completed, I was delighted to find (for the first time in our history, except it may have been in the early years before much advertising patronage came to us), that *our subscription receipts for the year exceeded our advertising receipts!* This, we understand, is phenomenal, particularly for a \$1 monthly. This was not due to decline in our advertising receipts, but to the increase in our subscription returns.

I have become convinced that both for our financial interests, and for the dignity and independence of journalism, it is our duty to collect our subscription accounts as closely as possible. Doctors are willing to pay for what they really want. I am trying to get doctors to *pay promptly* for the periodicals they really want, and decline to receive all others. We do not wish to send our journals to doctors who don't intend to pay. We have been too careless about this for our own good. I prepared a paper on this subject, for the meeting in ————. I inclose a copy herein. I prepared it in the interest of straight-forward, legitimate medical journalism. I trust that it has served, and will serve its purpose. Are you not tired of giving away literature? I am. Is it not worth its price? Then let us get it. If we all collect our subscription accounts, it will be better for us all financially, better for journalism, and better for the profession, for literature that is paid for is more highly prized, and the editor who is *paid* can produce better literature.

Sincerely, your co-worker,

Answer.—This showing is really phenomenal and we extend our congratulations. Of course, we do not doubt the statements shown by the books of our fortunate fellow editor. Educated books are a luxury, which few of us can afford in these day of competition in medical journals; yet we have long had our eye on a set of self-winding books, called the Autoequilibrists, because they balance themselves. All one has to do is to set a dial and get almost any result one wants. We have been experimenting with a sample set and have had some really remarkable results. Once, when the fiscal year was supposed to end on Christmas eve, the combination was set and after severe work on the part of the books, we found that our advertising receipts had trebled in cash, while the actual advertising space had shrunk to one-half its original quantity. This was all the more remarkable, because the checks for the advertising at the increased prices necessary to balance the books were found pinned to each account, all properly endorsed and ready for banking. On communicating with the advertisers, the startling fact was established, that the amounts had already been drawn from their bank accounts and receipted bills received. It is a great labor-saving device.

As to the collection of subscription accounts we must beg to be excused from taking part in so delicate a subject as the matter apparently is with our fair correspondent. The JOURNAL has a subscription list and a fairly healthy one; we, however, do not look upon the collection of our subscriptions as a duty; it is a genuine pleasure. Besides, the majority of our subscribers think so well of the JOURNAL that they usually pay for it in advance, which relieves us of the effort to get "doctors to pay promptly." Not alone do they pay in advance, but they want the JOURNAL, and if it is a mail late the telephone bells are worn to shreds of jangling metal by anxious inquirers. No, we are not tired of giving away literature. The only weariness we experience is in trying to give away some of the literature which comes to us stamped in beautiful purple letters, "sample copy." As we have already stated, we are so popular with the medical profession, that we cannot give the JOURNAL away if we wanted to; people absolutely insist on paying for it. Besides, our general air of careless prosperity gives us a financial standing, which overawes the "sample copy" fiend before he gathers himself together sufficiently to make his demand.

You have done wrong to give your journal away. It has gotten your subscribers into bad habits. We hope that next June your advertising receipts and your subscription receipts will be locked in a deadly embrace for supremacy, and that both will come out on top.

Here are some letters which one might expect to see in *The Medical Scrap*, together with appropriate answers:

HE LIKES US.

To the Editor of the Medical Scrap:

We are so taken with the *Scrap* down here that we can hardly wait from one month to another for it; it is so full of good things and helps to the doctor. When I take up the *Scrap*, I feel like I used to feel when I was a boy and was reading the *Fireside Companion* back of the woodpile; I wondered if I could wait until next week for to find out whether the villain really did marry the girl, for they always stopped and "continued in our next." Do you think I should have spelled stopped, stopt? They do in some medical journals.

Dr. X.,

Lost Dog, Texas.

Answer.—Good. We want you to wait for the *Scrap*. It's the goods, and all the rest of the journals are dime novels compared with us. You can spell stopped any old way you wish; we let our subscribers do anything they like. You do not ask for advice about a case? Maybe you overlooked it; all our subscribers ask about cases, and you should not be backward. However, you probably have a case which puzzles you. We have used Xzlmplxdyfmhg with a great deal of success and it will probably cure your patient and he will bless you and trumpet your fame broadcast throughout the land. You will find the remedy spoken of very highly on advertising page xc.—Ed.

A CASE FOR DIAGNOSIS.

To the Editor of the Scrap:

I have a patient who is in bad shape, and as I cannot find out what the matter is, I thought I would write you, as you have been so good and given so much good advice to other doctors who have written to you about cases which bothered them, and told them what to do which did it, and so I come to *The Scrap* for help in a case which bothers me a whole lot. This man is suffering with what I thought was grip with general malaise and a sinking sensation in his stomach. I gave him some atropine granules, with a few drops of belladonna tincture, every three or four hours. First, he seemed to be cured, because he did not complain of his original symptoms any more, but said his throat felt hot and dry, and I made a diagnosis of angina pectoris beginning scarlet fever; his throat was quite scarlet it seemed to me when I looked at it with one blade of my speculum which you sent me, and it has proved a very useful instrument as you said, for it is a tongue depressor and a speculum and a spoon for stirring medicines, and

if you will put in just enough medicine liquida to about half an inch from the end you will have about a teaspoonful of medicine for your patient. I don't think he has scarlet fever now, because he has got quite pale and sweats some, and I come to you for help. What do you think it is? There was a disease here some years ago which baffled the best medical talent in the country, and I thought maybe this was a breaking out of another epidemic.

I like the *Scrap* better every month, and all the rest of the people like it. There was a mistake made in an address in a little town just over the county-border. One of your journals came there addressed to James Taylor, M.D. It was a sample copy. James Taylor, M.D., died about eight years ago, but there was another James Taylor there, who keeps a stable down on the reservation road, and the postmaster says he got tired of sending them back, so he gave this one to Jim Taylor, and Jim had a sickness of some sort and he looked in the *Scrap* and saw something which fitted his symptoms, so he wrote to Milwaukee for some of the stuff, and when it came, he took it and it cured him, for he died the same night. He was kind of foolish anyway and somebody told him he had bugs, and he bought some of the bug powder that you told Dr. B. would kill bugs, and Jim took it all. They think it is an awful good joke down here, and they think the *Scrap* is quite humorous.

ARTHUR M., M.D.,
Wayup, Wis.

Answer.—Thanks, doctor, for your kind words. Your patient is evidently a very sick man, and you will have to work hard to save him. He has evidently got a bad attack of anginitis, due to taking something which has disagreed with him. Better give him a brisk cathartic and follow it with a gentle laxative. You probably saved his life by using what you did, and he owes you a great debt, which he can never repay with coarse money. For a purgative, we would suggest the purgative pellets, mentioned incidentally on advertising page cxlviii.; for a laxative the foaming salts which we have put on the market. Let us hear from you again, doctor, and tell us how your patient came out. If he does not get any better write us again and we will suggest something else. Ha, ha! that was a joke on your friend Taylor, doctor. Can you suggest someone who would be interested in receiving the *Scrap* in your neighborhood?—Ed.

It is claimed by several investigators that large quantities of chloride of sodium, or better still, Trunecek's organic serum, which is composed of the different salts of the blood, given in large quantities will prevent or delay arteriosclerosis, or old age of the arteries.—*Texas Medical Gazette*.

BUFFALO MEDICAL JOURNAL.**A Monthly Review of Medicine and Surgery.***EDITOR.*

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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No. I.

The Principles of Medical Organisation

MEDICAL organisation is the paramount topic of the day. In view of this fact possibly it will not be a waste of time to review some of the principles involved in the formation, or the evolution of medical societies,—in an inquiry into the reasons for and methods of this movement.

We would observe that, following the law of developing life, medical societies must evolve in the direction of more in number and greater in individuality; this is innate and inevitable. As the primitive forms of life show several functions performed by a single structure, so the primitive medical societies, those of fifty years ago, were at once administrative, executive, scientific and social. From increase in numbers of physicians, from experience and augmented responsibility, from the widening and deeping of the field of medicine, from the rapid growth of the various departments of state medicine, from the rapid rise of specialties in medicine comes the inevitable demand for more, newer, more flexible, more convenient, more democratic, more highly specialised societies. This demand is but the growth of a living profession, the imperious claim of a higher life for opportunity to speak, to demonstrate, to perform, even to live. It is evidence of progress, and this interesting situation needs to be understood and encouraged.

However, we may offer a warning against possible waste of effort, disappointment, and arrest of progress, from failure to see clearly that medical societies, and particularly more highly specialised societies, must have precise rather than general functions. When societies are multiplying with rapidity there is danger that all may not see clearly what work belongs to each; some confusion is liable, some jostling possible, until each finds its precise place and its individual work. Of the more serious societies of New York,—state, district, and county,—it is to be observed that they

are legal corporations, having the general powers and privileges of corporations and the special powers and privileges for which they were created. All of these powers, general and special, may be classed as executive, administrative, scientific, social and economical.

It is also to be noted that medical societies which are executive and administrative, must be constructed and conducted upon different lines from those which are economic and social in purpose. For instance, the early societies,—those constituted by the medical law of 1806, and its amendments,—were in the highest degree inclusive. They were simple in their purposes,—namely, “the diffusion of true science and particularly the knowledge of the healing art.” Membership in the county societies was not optional, but obligatory. The annual due was fixed by law and was low; ability to make by-laws was limited by the principle that membership was not optional, but obligatory; therefore, by-laws could not include any topic unless the same was plainly germane to the purposes of the organisation.

This, it will be seen is widely different from the plan of the more recent societies, that is, those of 1900 known as the associations,—state, district, and county. Here, coupled with general medical purposes are business ambitions,—life insurance, publication enterprises, defense from malpractice suits, and other laudable pursuits. They are not, however, of such general nature as to demand the support of all medical men. We, therefore, find that in the associations membership is not obligatory but optional, and power to fix annual dues is greater, while dues are many times higher, and by-laws may include many topics forbidden to the general societies, upon the common sense principle that as membership is optional no harm can result from such by-laws, or, at least, the aggrieved member has always the protective remedy of resignation.

Again, this principle of inclusion or exclusion is found to vary largely from the changing needs of the scientific life of medical societies. When the societies of 1806 were formed, specialism in medicine was unknown and special societies were not required; hence, for scientific purposes societies could be inclusive as to membership. For like reasons now, all men do not have time for, or feel equal interest in, all departments of medical knowledge and we, therefore, must have societies which are exclusive as to their membership,—and this without necessary rivalry or competition. Hence, the special societies.

There has been for years rivalry and competition in this state between our several state societies, and for reasons not entirely to our credit. The American Medical Association, in 1851, adopted

a report which substantially set forth that for a physician to believe in homeopathy was a misdemeanor, and was a just ground for expulsion from his county society, the majority of the profession having forgotten that the individual physician has a complete right to his opinion, even when that opinion differs from their own. As a result of this action the unity of the medical profession which had existed for half a century was broken in 1857, by the grant of a charter to the homeopathic physicians of New York for societies,—state and county. And unity was still further broken in 1865, by a like grant to the eclectic physicians. These grants were in all essentials like that of 1806, and the societies so formed were rivals.

Should misfortune prevail, this confusion and rivalry may possibly be still further increased by charter grants to some new sect. The future seems secure, however, in this respect, that before recognition the new sect will have to show willingness to meet the standards for state license in the fundamentals of medical knowledge. This will keep out the osteopaths and the Eddyites. Since 1882, the rivalry between the several medical societies of the state has been more apparent than real, the alliance then undertaken in the campaign for state license being a virtual concession and recognition of the legal and professional rights of the homeopaths and eclectics, and a virtual ending of any further possible rivalry, even if the disparity in age and in number of adherents had not already made such rivalry difficult, if not impossible.

Rivalry and competition between the state society of 1806, and the state association of 1900, are impossible, because the members of the association do not constitute a new sect in medicine. The future of the societies and associations of the State of New York will be determined by the services they will severally render to the multiplying and expanding interests of the medical profession; those that serve the most are the more likely to survive. In the meantime, we may confidently expect that a single society of delegates and permanent members, like the Medical Society of the State of New York, and a single county society in each county, simple, democratic, and inclusive in character, soon will come to exercise the entire executive and administrative concerns of the medical profession of the state. When this occurs, the homeopathic and eclectic societies,—state and county,—need not cease to exist, but may with the associations and the special societies continue to do scientific, social, or economic work, which voluntary and exclusive societies are peculiarly fitted to perform. The profession of the State of New York is about ready for such an organisation, and when the times are fully ripe, it will be organised.

State Examinations for Medical License in Pennsylvania

AT the recent meeting of the Medical Society of the State of Pennsylvania, Dr. O. A. J. Kelly, in an address on medicine, leveled a criticism at the Pennsylvania State Board of Medical Examiners, totally unjustifiable and wide of the real facts. Dr. Kelly must have been misinformed, or he would not have made such an unusual blunder as is shown by the paper which we print below from the pen of Dr. T. D. Davis, and taken from the June issue of the *Pennsylvania Medical Journal*.

Dr. Davis is vice-president of the American Academy of Medicine, is a physician of great experience and high standing, and appears to be quite familiar with state examinations for medical license. The paper is important, because it bears upon the general questions of state license in all the states; hence, we take pleasure in republishing it. The editor of the journal from which it is taken, says it is published "by request," but no apology is needed for printing such an able paper.

THE RECENT ADDRESS IN MEDICINE AT OUR STATE MEDICAL SOCIETY.¹

By THOMAS D. DAVIS, M.D., Pittsburg, Pa.

There is no subject so vital to the medical profession, at present, as its educational requirements. Closely allied to this is the organisation of the medical practitioners into a profession. Without this organisation there is no such thing as The Medical Profession. The supreme courts have ruled, "That any man is a doctor who calls himself such," and that, "Legally one doctor is as good as another." Medical societies of more or less importance, for scientific purposes, have existed here and there for many years, but a real effort to combine medical practitioners into an organised profession, that shall be recognised as such, by the people and the laws, has only been attempted during this generation. It has been almost entirely through this organised profession, that the recent great advances in educational requirements have been secured. For the very first difficulty that impeded this effort at organisation was the diversity of educational qualifications of practitioners. To overcome this obstacle our medical schools were importuned to elevate and make uniform their requirements for entrance and graduation. The Association of Medical Colleges accomplished something in this line, but not until the establishing of the State Medical Examining Boards was this demand felt by all schools to be absolutely necessary.

1. Read in the Beaver County Medical Society, April 9, 1903.

The establishing of these boards in Pennsylvania ten years since was entirely the work of the medical society of the state, through its appointed committee, and was accomplished after more than four years of arduous work and against great opposition. That they have accomplished much good is beyond question. It is not correct to say that "they were coincident with improved and lengthened medical courses," for they were forerunners of this advance. So, in the future, as these boards require better preliminary and better professional education, will the colleges require it also. Of course, these boards are not perfect, and proper criticism is always in order. However, the attack on our own state board by Dr. Kelly, in his address on Medicine (?), at the Allentown meeting of The Medical Society of the State of Pennsylvania, seems to me is not meant for friendly criticism. It simply ridicules, is uncharitable and appears vicious. It certainly can only be excused on account of prejudice, or lack of due consideration.

Not to stop to criticise the good form of abusing a child in the home of its mother, Dr. Kelly certainly has not read the act that established these examining boards in our state. In no place is it stated or implied that the act is, "To maintain the honor and reputation of the profession, . . . to prevent the charlatan and mountebank from humbugging." Quacks we have and humbugs also and possibly always will have them, but if possible let them be not entirely ignorant.

The reason for the establishing of these boards is, "That none but competent and properly qualified physicians and surgeons shall be allowed to practise their profession," and if possible bring all up to an educational standing of at least minimum requirements. It would be a consummation devoutly to be wished to have some judicatory that should pass on their moral qualifications also, but that is chimerical and only can they be reached by law when their acts become indictable. I wish our boards had the power Dr. Kelly seems to think they have. However, the address may not be intended to apply to our state alone; indeed it cannot be, for he claims that the medical practice laws were especially planned to control the Eddyite, the Dowieite, the christian scientist and osteopath, when all of these fakes have originated or come into prominence since our state medical examining boards were established, and this is true concerning a number of other states also. But even in the states that have more recent medical laws, not one word is aimed against any one in particular, but simply that all who practise medicine may at least have an educational qualification, and owing to the numerous and poorly equipped medical schools, this qualification must not rest on a diploma alone.

Dr. Kelly is surely defective in his history when he minimises the influence of these laws, for when an examining board was first urged by the Medical Society of the State of Pennsylvania, there was not a medical college in the state, except the Hahnemann, that

had more than a two years' course; indeed, they had only a one year's course, but two years' attendance was required for graduation, and when the boards were finally established, no regular college in the state had more than a three years' course—if that.

The address jumps with such nimbleness from one theme to another, that it is impossible to follow it closely, but I wish to consider its reflection on the State Medical Examining Boards and its views concerning "reciprocity." This may not be necessary in this presence, for he simply voices what has been suggested by others, and has been already answered. I presume, of course, as the address was delivered before and by the appointment of the Medical Society of the State of Pennsylvania, its strictures refer more particularly to the boards of our own state. First, he acknowledges some good accomplished by these boards, yet the praise seems grudgingly given and "radical changes are imperative." Next, he makes an unwarranted and unsupported attack on the members of the board. He claims in choice and gracious terms that they have, "a woeful lack of knowledge;" "manifest a disposition to be unfair, and an absence of judicious discrimination;" "are incapable of formulating a question in correct English, or one that is not ambiguous, unfair, inane, or asinine;" that some of the examiners, "are absolutely heedless of the progress of medicine;" "are more familiar with practical politics than the present state of medical science: and "have not added a book to their libraries for thirty years." If these accusations are all true, (but Dr. Kelly forgot to give a scintilla of proof to sustain them), then it follows, as none of these examiners ever passed a medical examining board, but are the pure product of the colleges before such boards were established they therefore furnish positive proof of the absolute necessity of these boards, and that the colleges cannot be trusted to produce qualified practitioners. Q. E. D.! But is that what the doctor intended to prove?

Having thus paid his respects to his fellow members of the state society on these boards, he proceeds to characterise the questions they ask as asinine! Now, as far as I can find recorded the only ass that ever spoke asked very fine questions! After hunting over the many hundred questions asked by the Pennsylvania Board, he cannot find enough bad ones to suit his purpose and so borrows some from other states, (with the covert purpose, I presume, of establishing reciprocity), and because he cannot get enough bad ones there he boldly crosses the ocean to Merry Old England and imports a few more! It is not my intention to defend poor questions from whatever source they may originate, but does Dr. Kelly know that in Pennsylvania and New York, at least, the medical examiners do not formulate the questions they have to ask? Or by what process of "active cerebral matter" that is not entirely destitute of logical cells does Dr. Kelly arrive at the conclusion, "that bad spelling, bad grammer, bad capitalisation, bad punctuation, the incorrect use of words, etc., by the student, is a

reflection on the examining board asking the questions?" Does he mean, that if the examinations were oral these defects could not be detected and therefore the board is to blame? From another part of the address I should judge this is what he does mean, otherwise there seems to be no possible sense in the statement.

The art of asking educational questions is a pedagogical function of acknowledged difficulty, and characterises only the best teachers. It is not, therefore, a wonder that some very poor questions are occasionally asked by these boards, but having looked over a large number I am surprised at their general excellence. It is the opinion of several of my young medical friends who have taken both examinations, that those of the state board are uniformly fair and not so difficult as those for competitive appointments to most hospitals.

Dr. Kelly errs again, it seems to me, when he insists that these questions should be entirely on practical points. It is the fundamental principles that are the essentials. Almost any quack or nurse can give odds to a recent graduate on practical points. They know what to do, but not why. The office students of the old practitioner used to learn how and what to do, but they often became mere empirics. The sole argument for the existence of medical colleges is to teach the fundamentals and build a scientific foundation. If this is not their chief function, then doctors' offices and hospitals are incomparably better for the embryo doctor and the student sinks into the apprentice. The utilitarian idea is running wild in some quarters. A student gets his practical knowledge at the clinics and his fundamental knowledge in the class room, and it is with the class room that the state boards are most concerned, for their chief object must be to require this essential knowledge; the practical knowledge will come later and for it the student will be examined by the great public.

He also sneers at the minutiae taught in the class room and, if he is correct concerning how soon it is forgotten, then it is a base deception and a fraud to compel a student to attend four years' medical courses to learn such stuff. Dr. Kelly wields a two-edged sword, that cuts which ever way it is turned.

Again, the address objects to written examinations, because they are of no use, but "to prove a good or bad memory." Surely as already noticed, they show the applicant's scholarship and preliminary training. I have tried in vain to find out just what Dr. Kelly does want. I am utterly unable to reconcile the assertion that "written examinations by *no means* achieve the ends for which they were instituted," with his statement, that written examinations, "to some extent, *at least*, should be continued, must be conceded." Such shifting certainly shows very active cerebral matter! However, he urges what Dr. Weir Mitchell has suggested, that applicants be required to diagnosticate and treat real disease in the living patient and perform operations on the cadaver. From one who especially advocates "practical" ideas this is

an astonishing proposition. I hardly need take your time to show the absurdity and impracticability of this suggestion. Even if exactly the same kind of patients, enough cadavers and a suitable place could be secured, and then the necessary time taken for such an examination of three hundred or more applicants, who would decide whether, "the examinee had furnished evidence of his practical ability?" Surely not those members of the board already so considerably described. But even if Dr. Kelly himself and others were appointed, there is always room for a wide difference of opinion on diagnosis, treatment and operations, and where doctors differ who would decide? No, in all such examinations we must select the subjects on which there is the most unanimity of opinion and the least room for honest differences.

To use the figure in the address, it is the solid foundation of all medical knowledge, the part that is below the ground that we want the expert to examine; the superstructure is visible, is inquired into, is examined, is put to practical uses and is criticised,—by the public. However, the greatest objections, to oral examinations, and which cannot be overcome, are that they give room for partiality, even fraud, are not available for comparison, and cannot be put on record for reference, or if needs be for evidence. It is also more than possible that the oral method may account for so many ignorant students passing the medical college examinations; at least, where written examinations were formerly unknown, they are now being used more or less by all colleges. Whether the "certificates of the state medical examining boards be a source of pride to those who secure them," or not, it is a fact that a certain 20 per cent. of those who are graduated by the medical schools would be rejoiced to have them!

Under so-called reciprocity, the address has nothing to offer that is not already being tried. It is in error again, however, when it states, "That a man may be a doctor in one state and not in another . . . a condition absolutely anomalous, and without its counter part in the practice of any other profession." Surely Dr. Kelly knows that a man may be a lawyer in one county even and not in another. Let a Philadelphia lawyer try to be admitted to the Lancaster county bar and see what difficulty he will have, or let him cross the Delaware river and he will find he has to reside three full years in New Jersey before he can become a full-fledged lawyer in that state. So in many religious denominations, going from one jurisdiction to another, a minister is compelled to stand an examination which may extend even to his college studies.

It seems to me, under the present conditions of development of our country, the easy transfer of a physician from one state to another would defeat all efforts to advance medical education. Scores of doctors who have been refused certificates by the Pennsylvania boards are now practising medicine in other states. On the other hand, in sparsely settled and poor parts of our country,

where compensation is very small and diseases more simple, a doctor should not be required, (although greatly to be desired) to make the expensive preparation necessary in the older states, and such is the case. Now if such doctor should remove to a state with a higher educational standard, it is only fair that he shall prove his qualifications.

Two grades of examinations, as the address suggests, would be manifestly unfair. For, if a number of doctors have passed the higher and harder grade, it would surely be an injustice to them, to allow one to come in and practise beside them who has only passed the easier grade, simply because perchance he has practised honorably in a state that has no requirements at all. Beside, I doubt very much, if any legislature would pass a law giving power to a board of medical men to decide, "who was an honorable practitioner of medicine." That is the function of the courts.

I realise that to some worthy men it works a hardship, but these are comparatively few and mostly make the change to better their pecuniary condition; but, I submit, these few, thoroughly qualified, honorable men, ought to be willing to suffer to keep out the hundreds, yea thousands of peripatetic fellows, who mostly change locations on account of their ignorant impositions.

To those who have had no experience with legislative bodies, it seems as if it would be an easy matter to have laws passed or amended, especially if they were intended for the public good, but such is far from the case. There are two sides to every question. All do not see alike. What some doctors may think is for the public good, legislators may think is positively pernicious. Attempting to amend laws is sometimes like opening Pandora's box. No medical legislation should be attempted until carefully considered and authorised by the organised profession of the state or nation. I think the recent attempt to amend the medical laws of this state, was untimely and is likely to result in much more harm than good. The examining boards have more power now than they exercise. Let them educate the profession and the people up to the full scholarly requirements that they can demand now, before asking for more power. There is absolutely no need and it is an imposition to require a student to spend four years in a medical college with the present curriculum. If the medical colleges will make their courses so hard that it will require four years to master it, that is another question, but as at present conducted, three years in a college and one in a hospital is far better. What the state board should demand is, that the applicant *has the knowledge*, and not where and how long it took him to get it. It might be possible for a student to get more and better knowledge from a private tutor and in a hospital! Let the boards put their educational requirements so high that it will take four or even more years in our medical colleges as at present conducted to attain them. However, if some one is particularly bright, or

can acquire the same amount of knowledge in less time, possibly on account of previous training, or by rigid application, why not let him do so? The law should not hold back, but encourage. Ability, application and preliminary training are of far more importance than the mere time consumed in a medical college, and these can be secured by the board by the severity of their examinations.

Our state medical examining board is endeavoring to advance and unify medical education. Let us trust it. Let us encourage, advise and assist, but throw no impediment in its way. Let us study to advance in the light of the past, realising out of what depths our profession has emerged. Rome was not built in a day, and we must not be impatient. Vast strides have already been taken. Let us criticise kindly, yet firmly, and advance if slowly, yet surely. The burden of the profession will soon be on the shoulders of those who have passed the state examining boards, and to them we will bequeath a better educated and a more united profession than was ever thought possible at the beginning of our generation. There is still much to be accomplished. We must get closer and closer together as a profession. While whole counties in our own state have no medical organisations and more than four thousand regular practitioners are outside of the organisation in this state, let us feel our shortcomings and do nothing to foment discord, but become zealous to unify our noble calling into a great and harmonious profession.

Buffalo Water Supply.

THE Buffalo pure water question has reached very nearly the acute stage, and after much discussion a joint hearing was held before the board of health and the committee on water of the Board of Aldermen, June 3, 1903.

It was thought best by those who had given the matter some thought that a commission composed of men acquainted with water conditions would be better able to clear up the situation and in time be competent to report back to the council the true status of affairs, such a commission to be composed of men who would devote time and energy to the study of the problem without hindrance from without or dissension from within. That is to say, it should be a capable, non-partisan and continuous body.

Moreover, such a commission could make a careful, comprehensive study of the water problem from the highest scientific standpoint; one which would stand the test of scientific criticism and yet adapt itself to practical and economical considerations. A commission thus organised could consider the water question from all possible standpoints, some of which we formulate:

1. Whether our city water is better or worse than the average of the large American cities.

2. Whether our city water is as impure as our city officials lead us to believe.

3. Whether better water could be secured in the lake or river other than at the present intake.

4. Whether better quality could be secured by pumping the water into reservoirs and, after sedimentation, allowing it to gravitate into the water mains.

5. Whether some means could not be devised to improve the water during the time of storms and upheavals on lake Erie.

6. Whether the contamination, if present, is due to local influences as Smokes Creek, the harbor, or back flow, or whether it is general and due to influences active at remote points.

The following observations appear germane to the issue :

1. If it should be found that our water supply is in good condition, then the water question should be dropped and our citizens saved from further anxiety and fear regarding its use.

2. If it should be found that our water supply is contaminated by local influences, then it should report the same to the proper authorities and suggest what steps should be taken to correct such pollution.

3. If the contamination is general and Lake Erie is found to be polluted from the sewer disposal and refuse of the communities bordering on its shores, then some steps should be taken to enlist the co-operation of the health boards of these cities with a view of preventing such pollution, or of asking the federal government to assist in this undertaking. Should it be found that our source of supply is contaminated and all efforts to correct the contamination prove unavailing, then this commission could study and report on the best method of filtration, leaving to the common council the question of ways and means for the construction and equipment of such a plant.

4. Such a commission should have the benefit of an expert in water analysis and an expert in sanitary science or a sanitary engineer, both to be the most practical and resourceful investigators that our country affords.

The common council has voted an appropriation of \$2,000 for expert services, and some progress can now be made. A commission of five, however, patterned after the grade crossings commission—with power to secure experts—would have been more desirable, perhaps, than the plan adopted, of having the Board of Health, already overtaxed, do the work.

George W. Fuller, of New York, has been appointed by Commissioner Greene of the health department to examine the

water supply. He will get \$75 a day from the appropriation above referred to. In part, Mr. Fuller will deal with the question of establishing a water-filtration plant for the city.

THE law providing for the State registration of nurses, passed by the last legislature, placed the appointment of the examining board in the hands of the regents of the University of the State of New York. From the candidates submitted by the executive committee of the New York State Nurses' Association, the regents have selected the following: For five years, Miss Jane Elizabeth Hitchcock, No. 265 Henry Street, New York. For four years, Miss Dorothy N. McDonald, No. 90 Hewes Street, Brooklyn. For three years, Miss Sophia F. Palmer, No. 149 Chestnut Street, Rochester. For two years, Miss Annie Damer, No. 76 Huron Street, Buffalo. For one year, L. Bissell Sanford, No. 217 East Twenty-seventh Street, New York.

Of these, Miss Hitchcock was graduated from the New York Hospital training school in 1891; Miss McDonald is a graduate of St. Mary's Hospital, Brooklyn, 1891; Miss Palmer is a graduate of the Massachusetts Hospital training school; Miss Damer is a graduate of Bellevue training school, 1886, and Mr. Sanford is a graduate of the Mills training school, Bellevue Hospital. The work of registration will now proceed as authorised by the law, the first meeting of the board having been fixed to occur in September next.

MESSRS. Fairchild Brothers and Foster, of New York, are actively engaged in bringing to punishment all druggists who are guilty of substitution in any way that affects this celebrated house. The latest conviction is set forth in a decree of the special term of the supreme court of New York, made June 25, 1903, in favor of Fairchild Brothers and Foster, plaintiff, against James Kerr, defendant, which is as follows:

Adjudged that the defendant, his clerks, agents, servants and employes, be and they hereby are, enjoined and restrained perpetually from selling or dispensing either at the drug store of the said defendant, at West New Brighton, in the Borough of Richmond, of the City of New York, or elsewhere, any essence of pepsine, or pharmaceutical preparation of any sort or kind whatsoever, not manufactured by plaintiff, in imitation of, or in substitution for, Fairchild's essence of pepsine, whenever Fairchild's essence of pepsine is prescribed or asked for, and from representing by any word or action that any preparation sold by said defendant, not manufactured by plaintiff, is Fairchild's essence of pepsine, together with taxed costs.

If the Bostwick-Dowling drug substitution bill, which passed the legislature last winter, had become a law, it would have simplified these procedures very much indeed. It is to be hoped that before another year rolls around, the principles set forth in the bill above mentioned will be placed upon our statute books, as a part of the legal protection which should be accorded the citizen.

PERSONAL.

DR. GEORGE BEN JOHNSTON, the distinguished surgeon of Richmond, Va., was elected an honorary member of the Tazewell County (Va.) Medical Society, at its annual meeting, held June 16, 1903. Dr. Johnston is a native of Tazewell, and, no doubt, will appreciate and prize the distinction conferred upon him by the physicians of that famous county.

DR. JOHN YOUNG BROWN, JR., of Saint Louis, Mo., has been appointed superintendent and surgeon-in-charge of the Saint Louis City Hospital. This is a most excellent appointment, Dr. Brown being an accomplished surgeon, as well as an administrative officer of ability and experience. He assumed his duties, May 13, 1903.

DR. H. H. GLOSSER, University of Pennsylvania, 1899, who located in Buffalo last year, has removed from 1007 Elmwood Avenue, to 234 South Division Street. Telephone, Seneca 1727.

DR. HUGO O. PANTZER, of Indianapolis, has been elected professor of gynecology in the Central College of Physicians and Surgeons, located in that city.

MAJOR ALBERT H. BRIGGS, M. D., of Buffalo, surgeon 65th Regiment, N. Y. N. G., was elected a vice-president of the Association of Military Surgeons of the United States, at the twelfth annual meeting of that body, held at Boston, May 19, 20 and 21, 1903. This is a befitting recognition of the valuable services of Major Briggs, both to the national guard and the association.

DR. JAMES F. W. ROSS, of Toronto, was elected president of the Ontario Medical Association, at its recent meeting, held at Toronto.

DR. WILLIAM H. CALLAHAN, of Buffalo, has been appointed sanitary inspector of the Chautauqua Institute at Chautauqua, N. Y. He was graduated from the University of Buffalo in May last, and was inspector of tenements for the State Commission, in which capacity his services were much appreciated.

DR. CHARLES CARY, of Buffalo, returned from an extended tour in Europe, during the latter days of July.

OBITUARY.

DR. FRANCIS MARION PERINE, of Dansville, N. Y., died at his home in that village, July 11, 1903, aged 72 years. He was a graduate of the University of Buffalo, class of 1855, and practised his profession in Dansville and vicinity for nearly 50 years. He held the office of coroner for 21 years, and was president of the village at one time. He is survived by his wife.

DR. HERBERT MICKLE, of Cleveland, formerly of Buffalo, died at Asheville, N. C., July 22, 1903, aged 43 years. He was born at Guelph, Ont., and was educated at Upper Canada College and Trinity Medical School, Toronto, and Saint Bartholomew's Hospital Medical School, London, Eng. He established himself in Buffalo and was at once appointed surgeon to the Emergency Hospital and demonstrator of anatomy in the Niagara University. Later, he became professor of surgery in Niagara University and attending surgeon at the Sisters' Hospital, Saint Francis's Hospital, Emergency Hospital and the Church Home. He lived at No. 526 Delaware Avenue. Two years ago he became afflicted with lung trouble and recently gave up professional practice and accepted the office of medical examiner for the New York Life Insurance Company at Cleveland.

Dr. Mickle is survived by a widow, who was with him when he died.

DR. DE LASKIE MILLER, of Chicago, died at his home in that city July 9, 1903, aged 85 years. He graduated from Geneva Medical College in 1842, and began the practice of medicine in Lockport, N. Y., removing from there to Flint, Mich., and finally settling at Chicago, where he resided 51 years. He had been a teacher in Rush Medical College for the greater part of that time. He was one of the most prominent and highly respected physicians in Chicago.

DR. ALONZO B. RICHARDSON, medical superintendent of the Government Hospital for the insane at Washington, D. C., died in that city June 27, 1903, from apoplexy, aged 50 years. Dr. Richardson was a native of Ohio and one of the most prominent alienists in the United States. He was president of the American Medico-Psychological Association at the time of his death.

DR. THOMAS M. ROCHESTER, of Brooklyn, died of consumption, at Rochester, July 12, 1903, aged 45 years. Dr. Rochester graduated in medicine at the University of Buffalo in 1878, at which time he was a resident of Rochester, where his mother now resides, and at whose house he died. Soon after graduating he removed to Brooklyn, where he became a practitioner of prominence and took an active part in the medical societies of the city of his adoption. He was also a member of the Oxford, Marine and Field, and Reform Clubs. He was a great grandson of Colonel Nathan Rochester, the founder of the city to which he gave his name, and a cousin of Dr. DeLancey Rochester, of Buffalo. The deceased was a remarkably bright student and attracted attention at the time of his graduation, on account of the unusual proficiency of his attainments. He is lamented by a large number of attached relatives and friends.

SOCIETY MEETINGS.

THE Medical Association of Central New York will hold its 36th annual meeting at Auburn, September 22, 1903, under the presidency of Dr. John L. Heffron, of Syracuse. The president asks that titles of papers be sent to him at once, as the program will be issued early in September.

THE Lake Keuka Medical and Surgical Association will hold its annual meeting at Grove Springs, Lake Keuka, August 11 and 12, 1903. Dr. Arthur W. Booth, of Elmira, is the secretary, to whom titles of papers should be sent.

THE Lake Erie Medical Society, held its regular quarterly meeting at Angola, N. Y., July 3, 1903. The following program was observed: Urine and its analysis, J. S. Wright; a paper by Dr. Moore, Dunkirk; Senile prostate, B. H. Daggett, Buffalo; a paper by Matthew D. Mann, Buffalo.

HOSPITAL NOTES.

THE Buffalo General Hospital has added eighteen private rooms and nine semiprivate rooms to its accommodations. These rooms are newly furnished, and completely equipped in every way, and are at the disposal of the physicians of Buffalo for private patients.

THE Buffalo Homeopathic Hospital has received from Mrs. William H. Gratwick, a substantial gift in the shape of a new ambulance of the latest construction and fitted with the most modern appliances. It will have rubber tires and ball-bearings axles, and every convenience for the comfort of the patient. A new harness is also included in the outfit.

BOOK REVIEWS.

AMERICAN EDITION OF NOTHNAGEL'S PRACTICE. I. Diseases of the stomach. by DR. F. RIEGEL, of Giessen. Edited, with additions, by Charles G. Stockton, M. D., Professor of Medicine in the University of Buffalo. Octavo, 835 pages, illustrated, including six full-page plates, Philadelphia, New York, London: W. B. Saunders & Company, 1903. (Cloth, \$5.00 net; half morocco, \$6.00 net.) II. Diseases of the Pancreas, Suprarenal Capsules, and Liver. By Drs. L. OSER and E. NEUSSEER, of Vienna; and Drs. H. QUINCKE and G. HOPPE-SEYLER, of Kiel. Edited, with additions, by Frederick A. Packard, M. D., late Physician to the Pennsylvania and to the Children's Hospitals, Philadelphia; and Reginald H. Fitz, M. D.; Hersey Professor of the Theory and Practice of Physic, Harvard University Medical School, Boston. Octavo, 918 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company, 1903. (Cloth, \$5.00 net; half morocco, \$6.00 net.)

I. This volume is, without question, the most comprehensive work relating to diseases of the stomach that has been published though, it must be confessed, Hemmeter gives it a neck-and-neck race. It is impossible to examine the literature pertaining to these ailments without encountering the names of Ewald, Boas, Leube, Einhorn, Hemmeter, Stockton, and now Riegel, Jones, and a few others, are to be reckoned with as lately having contributed to the present improved understanding of gastric maladies.

The employment of the stomach-tube for diagnostic purposes marked a distinct change in stomachal therapy, and to Leube belongs the credit of having introduced this method of diagnosis. Lavage of the stomach soon followed, as a natural consequence, and has become an accepted method in certain conditions. Nevertheless, it must be skilfully performed else it may fail to benefit or, indeed, may do harm. Riegel gives appropriate directions covering all the important points pertaining to lavage. The surgical treatment of these affections is considered at some length, mainly to point out which are amenable to the knife and when to invoke its aid, for it must be admitted that the specialist must make the diagnosis and determine when the surgeon's aid is needful. So far the principal conditions that offer the most opportunity for surgical intervention are cancer of the pylorus and perforated ulcer. The work of Hewitt, of Guelph, Ont., has been considerable in the latter condition, and we look forward to the time in the near future when it will be recognised as a contribution of valuable experience to the subject.

One of the main conditions that today claims the attention of the physician is hyperchlorhydria. It is afflicting those in the higher walks of life to an astonishing degree, and is not easily controlled or cured because so much of success depends upon careful regulation of the diet,—a discipline that most persons afflicted rebel against. This author is very clear upon this point as, indeed, he is upon the entire subject of hyperacidity. The volume is full of the latest and best information, and it is fortunate that so competent an editor as Professor Stockton has been obtained. His additions and annotations most thoroughly Americanise the work and give expression to the last thought on all important points.

II. Diseases of the liver, pancreas, and suprarenal capsules, which form the topics considered in the second volume of Nothnagel's practice now under examination, have become invested with increased importance of late, especially the maladies of the latter two. The liver is an old offender, yet for ages it has been charged with misdeeds that it was innocent of committing. Cholelithiasis, however, is one of the offenses that the liver has been guilty of from a very early day, yet not until recently has its significance become apparent. It is quite true that the older writers recognised gallstone disease, but it is also quite true that until Sims and Kocher introduced its operative treatment, no advance had been made in its therapy, since the days of sweet-oil and mineral waters as solvents.

Quincke and Hoppe-Seyler have set forth in the volume the most complete history of diseases of the liver we have seen, and all the modern methods of diagnosis and treatment are detailed with intelligent accuracy. Very properly, however, they refer to Kehr, Langenbuch, and Riedel for operative technique in the surgery of the liver and gall-bladder.

Professor Oser has presented a monograph on diseases of the pancreas, the value of which cannot be overestimated. If surgery may be credited with having influenced the advance in knowledge concerning diseases of the liver, so, too, must it receive like credit for improvement in diseases of the pancreas. Nearly all the best information on this subject has sprung up during the last ten years, and surgeons, both American and foreign, have been large contributors to it.

Diseases of the suprarenal capsules are dealt with by Professor Neusser in the most scholarly manner. Addison in 1855, described a disease of these bodies, which has become known by his name the world over, which, too, comprises about all that was known of suprarenal disease, until lately. In this monograph the entire subject receives adequate attention.

These two volumes serve to further accentuate the fact that Nothnagel's practice must become a standard guide for the clinician for some time to come.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science by Leading Authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In 21 volumes. Volume XXI.—Supplement. New York: William Wood & Co. 1903. (Price, cloth, \$5.00.)

The twentieth century is beginning with an energy no less strenuous in medicine than in other fields of science or business. Since the completion of the series of volumes, known as the "Twentieth Century Practice," many advances have taken place, requiring the publication of a supplementary volume to keep the work abreast of the immediate present. If we recall the improvements in radiotherapy, the discovery of the agency of the mosquito in the transmission of certain infectious diseases, advanced studies in hematology, bacteriology, and the investigations relating to cancer, together with many other researches that have been made, or are making, bearing upon important diseases, one can quite appreciate the presentation of this volume, in which all the recent work in these directions is recorded.

The section on yellow fever by General Sternberg, will prove of special interest. No man is more competent than he to deal with the subject,

and it is a credit to the medical department of the Army, over which General Sternberg presided so long and with such distinction, that through its agency and by one of its own distinguished members, Cuba was rid of an infectious disease that had existed without interruption for three centuries. The name of Walter Reed is inseparably connected with the eradication of yellow fever in Cuba, and General Sternberg tells the whole story in his brochure herein published. It appears that the general, himself, first suggested to Dr. Reed that special attention should be given to the possibility of the transmission of the disease by some insect, having previously studied the subject from this viewpoint in tropical countries.

The volume is replete with material of essential interest, and will be sought eagerly by those who possess the first twenty volumes, while every one who enjoys scientific research, may read it with genuine satisfaction.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. KELLY, A.M., M. D., Philadelphia, with the collaboration of Wm. Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris, and Richard Kretz, M. D., Vienna, with regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipzig, Brussels and Carlsbad. Volume I. Thirteenth series. 1903. Philadelphia; J. B. Lippincott Company. 1903. (Cloth, \$2.00.)

The new editor of this periodical has made an admirable beginning, this being the first volume of the "Clinics," under the editorial supervision of Dr. A. O. J. Kelly. The standard set by Dr. Cattell was a high one, yet the first volume of the thirteenth series gives promise of increasing excellence. The topics considered in this number are: 1. Treatment with Osler, Wilcox, Satterthwaite, Fenger, and Fussell, as contributors. 2. Medicine, with Billings and Bangs, as the authors. 3. Surgery, with Keen, Senn, Jonnesco, Ross (George G.), and Manley as lecturers. 4. Pediatrics with Thomson as sole contributor. 5. Orthopedics, to which only Shands contributes. Two special articles follow, one on functional reversion and its import in medical practice, by A. F. A. King, and the other on the general principles of embryology, by J. W. Ballantyne. Finally, comes a review of the progress of medicine, during the year 1902, prepared jointly by Edward Willard Watson, and Henry W. Cattell.

From this it will be observed that the contributors are men of fame, while the subjects appeal to the general reader. The illustrations in this volume are greater in number and better in quality than has been the case in many of the previous books.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1900-1901. Volume II. Washington: Government Printing Office. 1902.

The questions that will attract special attention are the coeducation of the sexes and the present educational movement in the Philippines Islands. Each are dealt with in considerable detail, about one hundred pages apiece being allotted. Prominent educators throughout the country have been invited to express their views on the subject of coeducation, and these opinions have been printed, in whole or in part, in this volume. There are also some notes on coeducation in foreign countries. In view of the general importance of the problem, it would be well for all interested in it, either practically or theoretically, to read the chapter herein devoted to its consideration.

As to the progress of education in the Philippines, much light is thrown upon the subject in the chapter printed in this book relating to it. The military government necessarily was compelled to deal with educational questions at first, and now the civil government, with Judge Taft, at its head, is grappling with this problem. The difficulties are herein set forth,

but the work seems to be progressing in a satisfactory manner. The remaining chapters of the book consider routine questions, relating to professional, normal, secondary, and private schools, as well as some other topics of interest to educators.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A Practical Exposition of the Methods, other than Drug-giving, useful for the Prevention of Disease and in the Treatment of the Sick. Edited by SOLOMON SOLIS COHEN, A.M., M. D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Volume X. Pneumotherapy, including Aërotherapy and inhalation Methods and Therapy, by Paul Louis Tissier, Chief of Clinic in the Faculty of Medicine of the University of Paris. Octavo, pp. 494. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1903. (Price for the set, \$27.50 net.)

The terms "pneumotherapy" and "aerotherapy," as herein applied, are concisely defined by the author. He says: The term pneumotherapy is applied to the use of respired gases for therapeutic purposes, directly or as carriers of medicinal agents; aerotherapy is a branch of pneumotherapy, dealing with atmospheric air.

These methods of treating the breathing organs have been too long neglected, or but partly applied, and that, perhaps, indifferently. A careful study of the treatise will serve to stimulate renewed energy in this direction, no doubt, and particularly to develop scientific application of medicinal gases and pure air to the treatment of the diseases to which they may be applied with appropriateness. It is hoped, too, that a better understanding of these subjects will serve to lift this treatment out of the hands of the quacks, "Koch lung cures," and all such swindling concerns. A careful study of this treatise is strongly advised. It is the most complete presentation of the subject that has appeared as yet.

A MANUAL OF DISEASES OF THE EYE. For Students and General Practitioners. By CLARENCE A. VEASEY, A.M., M. D., Demonstrator of Ophthalmology in Jefferson Medical College, Philadelphia. Duodecimo, 412 pages, with 194 engravings and 10 full-page colored plates. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, \$2.00 net.)

This excellent manual is one of the best that has been issued in recent years. For students and practitioners, it is an ideal handbook of reference, being practical, concise, copiously illustrated and showing the excellent judgment of the author in choosing what to include and what to omit. The therapeutics do not embrace some of the newer, standard drugs, and the suggestions in treatment in the more serious diseases are rather vague; but aside from this no fault can be found and the book should be in the library of every physician wishing a work on ophthalmology for reference.

R. H. S.

PROGRESSIVE MEDICINE. Fifth Annual Series. Volume II., June, 1903. A Quarterly Digest of Advances. Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 427 pages, with 46 illustrations. Lea Brothers & Co., Philadelphia and New York. (Per volume, \$2.50, by express prepaid. Per annum, in four cloth-bound volumes, \$10.00.)

The first section of this volume considers surgery of the abdomen, including hernia, and is prepared by William B. Coley. It contains a description of the newer methods relating to the surgery of hernia, the stomach, the intestines, the liver and biliary passages, the kidney, and some other organs or tissues. The illustrations are plentiful and delineative of the text,—the whole section being in keeping with the representative surgeon, who prepared it. The next section, gynecology, is edited by John G. Clark. There have been no remarkable discoveries of late in this department of medicine, yet considerable good work has been done in the line of perfecting methods or correcting errors. Cancer of the uterus, the urinary system in women, retrodisplacements, and inflammatory affections of the pelvic viscera, are the chief subjects presented here. The next section

offers discourse on diseases of the blood and ductless glands, the hemorrhagic diseases, and diseases of metabolism, and is arranged under the supervision of Alfred Stengel. Finally, ophthalmology constitutes a division under the marshalship of Edward Jackson. The best of the late literature is herein epitomised and handed out to a busy profession by some of the masters, not only in their several special lines of work, but by literary experts, who glean only the wheat, letting the chaff blow away.

HOW TO KEEP WELL. An Explanation of Modern Methods of Preventing Disease. By FLOYD M. CRANDALL, M. D., Twelve mo, pages 528. New York: Doubleday, Page & Company. 1903.

This author has written a book with a purpose, and that not solely or chiefly the one of giving instruction in hygiene; indeed, his book might be called a brief of modern medicine itself. To quote from the preface, he has endeavored to tell: "How medicine has risen from mysticism, supernaturalism, and superstition, and, having gradually emerged from the thralldom of astrology upon the one hand and theology upon the other, now stands forth in the foremost rank of the sciences: why it is worthy of acceptance rather than the crude systems of quackery and pseudo-science which one after another arise only to sink into obscurity; to set forth our knowledge regarding the prevention of disease and to show what advances have been made in recent years in our ability to prolong life and to prevent suffering, disease and death."

Dr. Crandall has carried out his endeavor in a commendable manner. The style is neither so simple as to be devoid of interest, nor so technical as to discourage the lay reader. It is written for the intelligent. All physicians deplore, not alone from selfish motives, the spread of pseudo-science and of quackery. The reasonable way to combat this is by the diffusion of knowledge, and to the mind of the reviewer there is no book which is so well adapted to this end as the one under discussion. It is worthy of a wide perusal and might well be introduced into secondary schools to supplement the course in physiology.

M. J. F.

A MANUAL OF REFRACTION AND MOTILITY. For Students and Practitioners of Medicine. By WILLIAM NORWOOD SUTER, M. D., Assistant Surgeon to the Episcopal Eye, Ear and Throat Hospital, Washington, D. C. Duodecimo, 382 pages, with 101 engravings and four colored plates. Lea Brothers & Co., Philadelphia and New York. 1903. (Price; cloth, \$2.00 net.)

Those wishing a condensed work on refraction and the motility of the eye, will find this a useful book for reference. Considerable space is devoted to the well-known mathematical formulæ illustrating the theory of refraction, some methods of determining refraction, together with short articles on hypermetropia, myopia, astigmatism, anisometropia and accommodation. Under disorders of motility a description of tests for the detection of the paralytic and nonparalytic are given; also, some of the best known operations for the relief of such conditions.

Combining refraction and motility in one book is an excellent idea, and the author is to be congratulated on making so complete a manual within 400 pages.

R. H. S.

THE CARE OF THE BABY. A Manual for Mothers and Nurses, containing Practical Directions for the Management of Infancy and Childhood in Health and in Disease. By J. P. CROZER GRIFFITH, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia. Third edition, thoroughly revised. Duodecimo volume of 436 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. (Cloth, \$1.50 net.)

This little treatise is without doubt the best of its kind in existence. Physicians acquainted with it are constantly recommending it to young mothers as a safe guide in the rearing of children. The third edition has been carefully revised and various additions have been made. It is a pleasure to know that the book is meeting a deserved success.

UTERINE AND TUBAL GESTATION. A Study of the Embedding and Development of the Human Ovum, the early Growth of the Embryo, and the Development of the Syncytium and Placental Gland. By SAMUEL WYLLIS BANDLER, M.D., Instructor in Gynecology in New York Post-Graduate Medical School. Small octavo, pp. 170. Illustrated by 93 drawings. New York: William Wood & Company. 1903. (Price, \$1.50.)

Since Lawson Tait wrote so graphically upon the surgery of ectopic pregnancy it has had a new meaning to the professional world, and it has been studied with new interest by physicians everywhere. This brochure takes up the study from a different viewpoint than that usually adopted. It begins by considering the essentials of uterine gestation, then takes up tubal gestation, and finally discourses upon ovarian and placental secretion. These are correlated parts of practically one and the same subject; hence, may be studied in consecutive order.

This author presents an interesting essay on the relation of ovulation to menstruation and discourses with much intelligent force upon the processes antedating uterine gestation. The development of the human ovum also is treated with clearness and much interesting discussion is had with regard to the embedding of the ovum. Many of the views herein set forth will become subjects for further investigation and remain to be established or to be set aside; nevertheless, they deserve careful examination by every obstetrician as well as every gynecologist. It will be a long time before the last word is said on uterine and tubal gestation, yet this author has contributed not a little toward solving the mysteries that surround these delicate processes.

MEDICAL JURISPRUDENCE, INSANITY, AND TOXICOLOGY. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College, Philadelphia. Third edition, thoroughly revised, greatly enlarged, and entirely reset. Duodecimo volume of 329 pages, fully illustrated, including four colored plates. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$1.75 net.)

It is not surprising that such an excellent manual should require reprinting and revising at comparatively short intervals. It deals with certain questions that too often are neglected by physicians, because they are not met with frequently perhaps; nevertheless, when confronted they often prove perplexing in the extreme. Therefore, it becomes necessary to be prepared for the emergency, and this book will serve the purpose of supplying the needful preparation. The author has had just the personal experience in his six years' service as coroner physician in a large city, that enables him to present the practical side of medical jurisprudence.

The size of the book is in its favor, too, because it is easy to carry along with one when going to court as a witness, and to consult while waiting to be called to the witness-box. This edition is somewhat larger than its predecessors, has been rearranged, revised, and in other respects made to conform to the present needs. It is, in all respects, therefore, the most complete and best planned manual on medico-legal questions that is before the profession at the present time.

DISEASES OF THE HEART AND ARTERIAL SYSTEM. Designed to be a Practical Presentation of the Subject for the Use of Students and Practitioners of Medicine. By ROBERT H. BABCOCK, A.M., M.D., Professor of Clinical Medicine and Diseases of the Chest, College of Physicians and Surgeons, Medical Department of the Illinois State University, Chicago. Octavo, pp. 874. With three colored plates and 139 illustrations. New York and London: D. Appleton & Company. 1903. (Price, \$6.00.)

This book is as large as such a treatise on the theory and practice of medicine thirty or forty years ago; and yet it is devoted to the consideration of a single organ of the body, albeit the most important of the viscera.

The studies of the diseases of the heart have been regarded as among the most difficult in the entire category of human maladies, but modern methods and recent investigations have served to simplify, in a measure, the perplexities surrounding this important segment of medicine. Such books as this play a significant part in developing a simpler and clearer method of study. The distinguishing features of this treatise are its practical character, the omission from its pages in large part of mere theories, a clear but limited use of anatomy and physiology, ample consideration of physical signs in the diagnosis of heart affections, simple phraseology, familiar terminology, and special consideration of treatment in an amplitude of detail not heretofore observed in works on the heart.

If we should undertake to present with analytical detail the contents of this treatise in consecutive order, it would weary the reader, we fear; but we must confess, the temptation to enter into a general discussion of the subjects dealt with by the author is very great. He has grouped in a single volume all the essential facts connected with the heart and its diseases, making a study of this subject one of agreeable occupation, instead of laborious application, as heretofore has been the case, with a literature scattered throughout textbooks and magazines.

It is the best illustrated treatise on the heart and bloodvessels we have seen from the viewpoints of both quantity and quality, and in general it may be regarded with entire justice, as one of the most agreeable, if not useful, medical books of the season.

PRACTICAL POINTS IN NURSING. For Nurses in Private Practice. With an Appendix containing Rules for Feeding the Sick; Receipts for Invalid Food and Beverages; Weights and Measures; Dose List; and a full Glossary of Medical Terms and Nursing Treatment. By EMILY A. M. STONEY, late Superintendent of the Training School for Nurses, Carney Hospital, South Boston, Mass. Third edition, thoroughly revised. Duodecimo of 458 pages, fully illustrated, including eight colored and half-toned plates. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$1.75 net.)

This excellent manual proves its popularity in the early appearance of the third edition. The death of its author has made necessary its revision at other hands, but the practical character of the book is not lost thereby, the changes being only such as serve to keep it abreast of the progress of modern medicine. It has become a standard in its field and should be found in every hospital library, as well as in the hands of every nurse.

THE EXPECTANT MOTHER. A Treatise on the care of Expectant Mother during Pregnancy and Child-birth and the care of the Child from Birth to Puberty. By W. LEWIS HOWE, M. D. Pages VIII-63. Small 12mo. F. A. Davis Company, Philadelphia. 1903. (\$.50 net, delivered.)

Whenever a physician desires to place in the hands of his women patients a book which contains in small space all that a mother really needs to know to prepare herself for confinement and intelligently to rear her child thereafter, he may give them this little volume. It does not aim to make every mother her own doctor and, therefore, is just suited as a guide to the woman of limited intelligence on the subject-matter of which it treats.

BOOKS RECEIVED.

Gynecology. A Textbook for Students and a Guide for Practitioners. By William R. Pryor, M. D., Professor of Gynecology in the New York Polyclinic Medical School; Attending Gynecologist to New York Polyclinic Hospital; Consulting Gynecologist to St. Vincent's, New York City and St. Elizabeth's Hospitals. Octavo, pp. 396, with 163 illustrations in the text. New York and London. D. Appleton & Company. 1903. (Price, \$3.50.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VI. General Medicine. Edited by Frank Billings, M.S., M. D. Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago. And J. H. Salisbury, M. D., Professor of Medicine, Chicago Clinical School. Duodecimo, pp. 316. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$7.50.)

Medical Reports of the Sheppard and Enoch Pratt Hospital. Vol. I., No. 1. Baltimore, Md. 1903.

A Reference Handbook of the Medical Sciences by various writers. New edition. Edited by Albert H. Buck, M. D. Volume VI. Imp. Quarto. 1012 pages. 764 engravings. Nine full-page plates, in black and colors. New York: William Wood & Company. 1903.

First Principles of Otology. A Textbook for Medical Students. By Albert H. Buck, M. D. Clinical Professor of the Diseases of the Ear, College of Physicians and Surgeons, Medical Department of Columbia University, New York. Duodecimo, pp. 227. Second edition. Illustrated. New York: William Wood & Company. 1903. (Price, \$1.50.)

Transactions of the Southern Surgical and Gynecological Association. Vol. XV. Annual meeting, held at Cincinnati, O., November 11, 12 and 13, 1902. W. D. Haggard, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1903.

A Treatise on Organic Nervous Diseases, by M. Allen Starr, M. D., Ph.D., LL.D., Professor of Diseases of the Mind and Nervous System in the College of Physicians and Surgeons (Medical Department of Columbia University), New York; Consulting Neurologist to the Presbyterian and St. Vincent's Hospitals, St. Mary's Free Hospital for Children, etc. In one octavo volume of 751 pages, with 275 engravings and 26 plates in colors and monochrome. Lea Brothers & Co., New York and Philadelphia. 1903. (Cloth, \$6.00; leather, \$7.00 net.)

Lea's Medical Epitome Series. Medical Jurisprudence. A Manual for Students and Practitioners. By Edwin Welles Dwight, M. D., Instructor in Legal Medicine, Harvard University. Series edited by V. C. Pedersen, A.M., M.D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Duodecimo, pp. 249. Philadelphia and New York: Lea Brothers & Co. 1903.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia, with the collaboration of Wm. Osler, M.D., Baltimore; John H. Musser, M.D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris, and Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume II. Thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. 1903. (Cloth, \$2.00.)

Lea's Medical Epitome Series. Microscopy and Bacteriology. A Manual for Students and Practitioners. By P. E. Archinard, A.M., M.D., Demonstrator of Microscopy and Bacteriology, Tulane University of Louisiana, Medical Department. Duodecimo, pp. 210. Illustrated with 74 engravings. Series edited by V. C. Pedersen, A.M., M.D., Instructor

in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903.

A Thesaurus of Medical Words and Phrases. By Wilfred M. Barton, M. D., Assistant to Professor of Materia Medica and Therapeutics, and Lecturer on Pharmacy, Georgetown University, Washington, D. C.; and Walter A. Wells, M. D., Demonstrator of Laryngology and Rhinology, Georgetown University, Washington, D. C. Handsome octavo of 534 pages. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, \$2.50 net; with thumb index, \$3.00 net.)

LITERARY NOTES.

THE *Journal of Infectious Diseases* will be issued in the fall, edited by Professor Ludwig Hektoen and Professor Edward O. Jordan of the University of Chicago. The expenses, estimated at \$5,000 annually, will be met by Mr. and Mrs. Harold McCormick. Since the death, a few years ago, of their son, Jack Rockefeller McCormick, Mr. and Mrs. McCormick have founded the institute for the study of infectious diseases, connected with Rush Medical College. The *Journal* will give to the scientific world the results of work done there and in other laboratories.

THE Arlington Chemical Co. has arranged to issue, under the title "The Law and the Doctor," two 48-page booklets, which shall present in condensed form and succinct style, an epitome of the essentially important features of (1) "The civil liability of the physician for malpractice," and (2) "The physician as a witness." These exceedingly practical monographs have been expressly prepared by an eminent member of the New York Bar, who is well recognised by the legal profession as an expert in this special branch of practice. The first of these reference text manuals is now ready for distribution and after a reasonable interval will be followed by the second monograph. Copies may be had by applying to the above company.

MISCELLANY.

MISS NELLIE S. DAVIS has established a directory of nurses, at the Waldorf Flat No. 1, 1112 Main Street, Buffalo, where nurses may be had at short notice without expense to physicians. The prices range from \$7.00 to \$25.00 a week, and only nurses of reliability are provided. Applications are received at all times of day or night. Miss Davis refers by permission to Drs. Roswell Park, W. H. Thornton, and N. L. Burnham. Telephone, Bryant 958 R.

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ORIGINAL COMMUNICATIONS.

Light Waves, Visible and Invisible.

By FREDERICK HOYER MILLENER, M. D., Buffalo, N. Y.

Surgeon for Diseases of the Nose, Throat and Ear at the German Hospital Dispensary.
Member of the Buffalo Academy of Medicine and of the Medical
Society of the County of Erie.

THE therapeutic potency of light waves, visible and invisible, (the x -rays and the ultraviolet light), has of late been vaunted with so much sensational exaggeration in some of the more unscrupulous daily newspapers, that there is some danger of this promising method becoming enveloped in a miasmatic vapor of quackery that may seriously interfere with the development of its practical usefulness and the mischief thus wrought is twofold: false hopes of cure are excited in the minds of sufferers and their friends; and the treatment itself comes to be regarded by medical practitioners as pitch that defiles those who touch it. In this way an element having in it large possibilities of good, may be unjustly discredited in the eyes of both the profession and the public. Hence, it is at the present time especially important that the results obtained by means of the x -rays, by practitioners whose work is open to the inspection of their professional brethren, should be fully and accurately recorded with the purpose of showing both what has been attempted and what has been accomplished. Observers of equal honesty receive different impressions from the same phenomena, and even their records of facts take the color of their mental temperament. Inexperience is generally prone to an unfounded optimism; on the other hand, impatience and want of attention to detail, lead to an equally unfounded pessimism. One of the obstacles to the progress of medicine is what may be called the summary mode of dealing with methods on their trial. A method should not be condemned when applied improperly if it fails in unsuitable cases.

For a thorough understanding of the x -rays, the ultraviolet light, and other light waves used in medicine, a consideration of the spectrum is necessary. When a beam of sunlight is allowed to pass through a small aperture into a dark room and fall upon a prism, the ray of light passing through the triangular piece of glass is decomposed and, on its emergence upon the other side, is separated into the seven prismatic colors. If the axis of the prism is vertical and the decomposed ray is directed upon a white screen, it will appear as a long narrow ribbon composed of the seven primary colors in which the red will be to the left, followed in order by orange, yellow, green, blue, indigo and violet. If the temperature of these colors be tested by that extremely delicate thermometer, the "thermoelectric pile," it will be found that there is no appreciable heat in the violet, nor in any of the colors until the red is reached, and that tested by the thermometer, the heat increases in the dark space beyond the red ray, which space is known as the infrared, calorific or thermal space. If, on the contrary, a photographic plate is exposed to the action of the prismatic ray, it will be found that the red, orange, and yellow rays have no appreciable effect upon the sensitive coating on the plate, and that it does not commence to darken until it is exposed to the blue light; and further, that the shade gradually increases through the indigo and violet rays, reaching its maximum in the dark space beyond the violet, which space is known as the actinic or ultraviolet space. These waves are of such short length that of course, they cannot be seen. It is in this actinic space beyond the ultraviolet, that the wonderful influence known as the cathode and x , or Röntgen rays are found.

The accepted theory of the nature of the forces known as sound, light and heat, is the "undulatory". According to the theory, the entire universe is pervaded by an extremely attenuated mobile gas, known as luminiferous ether, which is imperceptible except when thrown into vibration. A vibration of many hundreds or thousands of waves a second which affects our hearing apparatus, we recognise as sound; a vibration of many millions of waves a second which affects the nerves of feeling, we recognise as heat; a still higher rate of vibration affects the nerves of sight and we recognise it as light. If the vibration comes from a solid body as from the sun, from the fine particles of carbon in a lamp, or from a molten body, the vibrations are of all rates of frequency and all the colors of the spectrum are present, but intimately mixed and blended, we see only the white light.

The discovery of the x -rays is due to the investigation of the effect of the electric spark upon the atmosphere. If an electric spark is passed through a tube or vessel containing air, the effect

is the same as when passed through the outside air, but if the air in the tube is partially exhausted by means of an air pump, the spark becomes broader, has less of a zig-zag direction and with less noise. If the air is withdrawn as much as possible by the pump, there is no longer any spark, but the whole vessel is filled with a beautiful purplish light. In the Geissler tubes, which are from six inches to several feet in length and from one-half to two inches in diameter, from which the air is almost but not entirely exhausted, hermetically sealed, and fitted with platinum wire at each end, the electric current can be passed through the rarefied atmosphere, producing a brilliant light,—purple, if the tube contains air only; red, if it contains hydrogen, and various other colors with other and different gases.

In the Crookes tubes, a modification of the Geissler tubes, the attenuation of air is carried to so high a degree that it is estimated that a millionth part only of the ordinary atmospheric pressure is present. In seeking the rationale of the phenomena exhibited, it may be said that the particles of the gas contained in the tubes when excited by the electric current vibrate, each particular gas at a definite rate of speed, in a similar manner to the vibration of the strings of a musical instrument, each string vibrating at a certain rate to produce the note to which it is attuned. In considering the x -rays, we must remember they are ultra ultraviolet, in fact way beyond the violet; therefore, the waves are so short that they are invisible, so that in some way we must account for the light which we see. It is done as follows: if we regard the tube as a small box filled with small balls, the balls representing the molecules of gas, on shaking the box as the balls cannot move there will be no sound. If some of the balls are removed, the air withdrawn in the case of the tube, allowing the remainder to move freely, on shaking the box the balls will be thrown from side to side. If nearly all of the balls are removed, or the air exhausted, and the box violently shaken, the few balls left will strike against the sides of the box with much force. In the case of the Crookes tubes where the rarefaction is very great, the particles of air are hurled from one end of the tube to the other with such force as to beat the walls of the tube or any object they may strike in the same way as a piece of iron can be made red hot by hammering. These particles of air may be driven against the walls of the tubes with such force as to crack them or melt them by the heat produced. It has been found by Nikola Tesla that particles of air may be forced through the glass. This impact of particles against the sides of the tube imparts to the luminiferous ether a peculiar vibratory motion which is continued through wood, metals, flesh, bone and other opaque objects, and

after having passed through them is still capable of affecting a photographic plate and of bringing out fluorescence.

Other rays which are used in medicine and surgery are as follows:

Ultraviolet.—If we compare the Röntgen rays with the ultraviolet radiations, we will note some resemblances, but still some notable differences in their physical manifestations:

X-RAYS.

1. Cannot be reflected, refracted, or polarised.
2. Can penetrate and traverse many bodies that will not permit the passage of luminous rays: *e. g.*, wood, aluminum, etc.
3. Will readily traverse the superficial tissues and influence the nutrition of the deeper ones.
4. Will traverse a thick book.
5. Have no appreciable effect on the vitality of bacteria.
6. Will discharge an electroscope, either positively or negatively electrified.
7. Will excite bright green fluorescence in willemite, and induce white phosphorescence in polysulphide of calcium.
8. Rock salt is opaque to *x*-rays.

ULTRAVIOLET RAYS.

1. Can be reflected, refracted and polarised.
2. Will not traverse many bodies that are perfectly pervious to luminous rays, *e. g.*, glass.
3. Will not influence the deeper tissues, nor even the superficial ones, unless they are deprived of their usual blood contents; that is dehematised.
4. Will be stopped by a single leaf of the same book.
5. Will rapidly destroy the vitality of bacteria.
6. Will discharge an electroscope if electrified negatively, but not positively.
7. Will excite bright green fluorescence in willemite, and induce *blue* phosphorescence in polysulphide of calcium.
8. Rock salt is transparent to ultraviolet rays.

The differences here pointed out indicate the fact that we are dealing with agents of totally dissimilar nature, although in certain forms of disease they may both be used to effect the same end; that is, in the treatment of cutaneous affections of an extremely superficial character, while *x*-rays may further be used for the successful treatment of deeper lesions.

Leonard Rays, discovered in 1894, have the power of penetrating thin sheets of metal and of producing photographic action

as well as discharging electrified bodies. They are also deflected by the magnet. They differ from Röntgen's rays in their penetrative power, for air is relatively opaque to them.

Becquerel Rays.—The Becquerel rays are invisible radiations emitted from the salts of the metal uranium, as for example, the nitrate of uranyl and the fluoride of uranium and ammonium. These and other salts of uranium, whether in dark or light, emit a sort of invisible light, which can pass through aluminum and produce on a photographic plate shadows of metal objects. Becquerel's rays possess, like ultraviolet light (though to a lesser degree by reason of their lesser intensity) the property of dis-electrifying charged bodies. These rays are absorbed by air. Water is transparent to them. Metallic solutions are transparent as also are wax and paraffin; uranium glass and red glass 2 mm. thick are fairly opaque. There appears to be no doubt that the uranium rays are a species of extreme ultraviolet light having a wave length certainly less than ten microcentimeters and a frequency certainly greater than 3,000 billions per second.

Phosphorous Light.—Professor Thompson has examined the penetrative effect of the pale light emitted by phosphorus when oxidising in moist air. It is accompanied by some invisible rays which will penetrate through black paper or celluloid, but will not pass through aluminum. He found that they emitted rays which, after filtration through card or through copper plates, would act photographically. These rays can be reflected and probably refracted and polarised. He used about a 1,000 fireflies shut up in a shallow box over the screened photographic plate.

Wiedmann's Rays.—Professor E. Wiedmann, in 1895, described some rays named by him discharge rays, which are produced in vacuum tubes by the influence of a rapidly alternating electric discharge. They have the property of exciting in certain chemically prepared substances, notably in calcium sulphate containing a small percentage of manganese sulphate, the power of thermo-luminescence. In other words, the substance after exposure to these rays will emit light. When subsequently warmed they are emitted at lower degree of rarefaction than are necessary for producing the x -rays. They are emitted from all parts of the path of the spark discharge, but more strongly near the cathode. They are propagated in straight lines but no reflection of them by solid bodies has yet been observed. They are readily absorbed by certain gases, but their production is promoted by hydrogen and nitrogen.

Professor Thompson has recently found two new kinds of cathode rays. One he terms parakathodic, and the other diakathodic ray. The parakathodic ray is produced when ordinary

cathode rays strike upon an antikathode, as in the focus tubes. If the vacuum is low, there are emitted from the antikathode, in nearly equal intensity in all directions some rays that closely resemble ordinary cathode rays. They can be deflected electrostatically and magnetically, and can cast shadows of objects on glass walls. If the vacuum is high enough for the production of, Röntgen rays some parakathodic rays are produced at the same time. They cause the glass bulb to fluoresce over an obliquely limited region. The diakathodic rays are produced by directing the ordinary cathode rays full upon a piece of wire gauze or upon a spiral piece of wire, which is itself negatively electrified. The ordinary x -rays refuse to pass through the meshes of the gauze, but instead there passes through a beam of bluish rays which differ from cathode rays in that they are not directly affected by a magnet. These diakathodic rays can also produce fluorescence of the glass where they meet the walls of the tube, and can cast shadows of intervening objects; but the fluorescence is of a different kind.

Goldstein's Rays.—Herr Goldstein has also described some rays apparently closely akin to those just mentioned. If a perforated disk is used as a cathode, there are produced some blue rays which stream back behind the cathode opposite the apertures.

Radium.—This new element is about 225 times as heavy as hydrogen. Radium, in its general chemical characteristics, is a member of the same group of elements as calcium. When radium salts, or mixtures rich in radium salts, are brought near the closed eyes or to the temples, a peculiar sensation of light is perceived, not only by those who possess efficient eyes, but by the blind. Radium owes its name to the property which it possesses of emitting spontaneously visible rays in darkness. Radium always emits in darkness a perfectly distinct light. Besides, outside of its own luminescence which is shared by its compounds, it has the power of imparting luminescence to others. This is the reason why substances which become phosphorescent under the action of ultraviolet rays are illuminated in the vicinity of the radium. On the contrary, substances which become phosphorescent in red light remain inert near radium. The degree of luminosity depends evidently on the distance from the radiant source. Moreover, radium transmits to certain metals placed under its influence the property of emitting in their turn radiations. This is called secondary or induced radioactivity; under the radiating action of a particle of radium, a screen of platino-cyanide of barium or of tungstate of calcium is lighted up, as it would be in ultraviolet rays.

The Crookes tubes emit two kinds of rays: cathodic rays

lodged in the interior, going from the cathode (—) to the anode (+) and propagated like light in a straight line, but with only half its velocity; and the x -rays or Röntgen rays, which only originate at the points where any matter whatever,—solid, liquid or gaseous,—arrests the cathodic rays in their passage. The x -rays in the tube focus start, therefore, from the metal plate of the anode, which the cathodic rays have struck, then traverse the glass and are uniformly distributed in every direction near the tube. The radium rays possess at the same time the property of the cathodic rays and of the x -rays. Like the cathodic rays the rays which emanate from radium are deflected by the magnet; the cathode rays are totally deflected, the radium rays only partially. A part of the rays remain neutral under the influence of a magnetic field, which leads us to suppose that radium possesses two different species of radiations. The velocity of propagation of radium rays is also half of the velocity of light.

Finsen's Light.—Finsen first found if a number of earth worms were placed in an oblong box covered half with red glass and half with blue glass, that the worms will always crawl away from the blue glass and lie under the red. On summing up this and many other experiments he found that all the red or heat rays could do was burn when intense enough, as fire burns. But the actinic rays which do not burn, have other properties that may render them very beneficial or harmful to animal life. Thus, it is the active rays that produce ordinary sunburn,—really not sunburn at all, but an irritation of the skin. He has turned these observations to a practical use in medicine.

The Peter Cooper Hewitt Light.—Mr. Hewitt's mercury vapor light is a light in which the red rays are totally absent. It will probably be of value in medicine chiefly as a means of diagnosis, as the appearance of a person under that light is very ghastly, there being no red rays in the light. The result is that any red spot or particle of red on a person or object observed becomes a deep purple. The value of this lamp will thus be evident. What, on an ordinary skin or mucous membrane would appear red, either faintly or more distinct, will now have a distinct purple appearance; therefore, a mild inflammation or rash, may be earlier and more clearly detected.

Mode of action of the x -rays on diseased tissues.—The mode of action has not as yet been clearly determined. Their action was at first believed to be mainly bactericidal. This theory had however, to be given up for two reasons. On the one hand, it is very doubtful whether the rays possess the property of destroying microorganisms,—indeed, the majority of investigators believe that they stimulate their growth; on the other, good results have

been obtained in diseases, the production and evolution of which microbes play no part whatever. Their effect has also been attributed to the corrosive action of minute platinum particles; to the generation of ozone in the skin and to electric waves given off from the tube. They appear to have marked influence in retarding osmosis. Some authorities think it possible that it is in this property of the x -rays that the secret of their biological and therapeutic action lies. By retarding the osmotic processes throughout the system, they cause changes in the intimate condition of cells, constructive or destructive, which must have an influence on the nutrition of the tissues. On the skin the x -rays often cause an inflammatory reaction varying in intensity according to the distance and the degree of exhaustion of the tube; the quantity and potential of the current; and the construction of the interruptor, coil, or other apparatus employed.

Neisser compares the action of the rays on the skin to the local action produced by tuberculin. Kaposi held that they acted upon the bloodvessels, producing an alteration in tone, bringing about healing and absorption of the granuloma by fatty degeneration or molecular change. Scholtz experimented on various animals and found microscopic changes, consisting of swelling and edema of the epithelial cells and champing and shrinking of the nuclei, with a clear space in the cell protoplasm. Splitting of the nucleus in cell division was rarely seen, but many of the epithelial cells showed nuclei which seemed to be in process of dividing. There was marked edema of the corium, its fibers being swollen and staining badly, the elastin being more resistant than the collagen. The connective tissue cells were affected in a similar manner to those of the outer layer of skin, as also were the cells of the sweat glands, the hair follicles and the intima of the large bloodvessels. There was abundant inflammatory infiltration of cells, chiefly leucocytes. Masses of leucocytes were present beneath the epidermis; the mast cells in the corium were increased. Toward the center lesions there were superficial vesicles in the stratum corneum. Scholtz concluded that the rays cause a slow degeneration of the cellular elements of the skin, both of the epidermis and corium, the nucleus as well as the protoplasm being affected. There is also a less marked degeneration of the fibrous elements. As soon as the cellular degeneration reaches a certain degree, an inflammatory reaction occurs in which the bloodvessels become dilated and the usual phenomena of inflammation take place—namely, an extravasation of serum and leucocytes. The latter seem to act as phagocytes and completely destroy the degenerated cells. The microscopic changes caused by the action of the x -rays on the tissues are numerous, interesting and varied.

The physiological properties of radium.—The physiological properties of radium rays are especially remarkable. While the prolonged application of the x -rays produces on the skin a simple erythema, perhaps the falling out of the hair or even a burn, radium produces a veritable burn,—an almost intractable burn. It yields only to treatment of months. M. Becquerel was accidentally the victim of these deadly rays, by carrying in his pocket a tube containing a few decigrammes of slightly active radiant matter. M. Curie, voluntarily in the cause of science, devoted himself with true heroism to their cruel attack and sacrificed a part of the skin of his arm. The direct contact of radium causes in a short time a dropping off of the skin followed by severe and persistent pain. The vegetable world is as susceptible as man. The seeds of mustard and garden cress, exposed to the corrosive influence of radium lose their germinating power. This is wonderful, but not so astonishing as the fact that all these different effects, some more singular than others, are produced by a single particle of metal through a double covering of glass, without this magic power being diminished by time. It appears from reliable calculations that with radium the loss of substance caused by the radiating energy for one cubic centimeter, would be one milligramme in a thousand million years.

How to achieve results by means of the x -rays.—It is highly important that the result of the x -rays treatment should be emphasised by a full and detailed publication. There is undoubted evidence that the benefit to be derived from the x -rays is almost illimitable. The great aim of those who adopt this method of treatment is to endeavor to utilise to the fullest the healing qualities and power of the rays. Keen observation and sound judgment are essential and we should have no hesitation in asserting that the success obtained is in proportion to the exercise of these faculties. The results already achieved are of an excellence and endurance sufficient to give substantial indication of what one may expect from the rays in, let us hope, the near future.

Attention to detail.—The character of the coil, the voltage used, the condition of the tube, the distance of the patient from the instrument, the duration and frequency of the sittings and the intervals between each; and, also, whether or not, any other treatment is applied. These are details which are many times overlooked, but are of great importance. No hard and fast rule can be adopted, but the effect of the rays can be applied to individual cases and regulated to suit the various stages of a disease, by strict attention to the above injunction. This applies more specially to the condition of the tubes and to the limitation or extension according to requirements of the exposure given the patient.

Different tubes have different capabilities, and a good tube usually comes only by careful nursing and attention. There are many who place too great reliance on the length of the sitting. In many articles I have read the period of exposure adopted by the writer was stated to be from ten minutes to an hour every day. This is not the best way. It should always in using these waves be the object to obtain as rapidly as possible a tangible result consistent with safe treatment, because we do not know all of the properties of the light we are using.

Rays and operation compared.—The advantages of the x -rays over operative treatment are principally in effect. After healing they leave a soft, pliable skin, devoid of contraction, and the face is not disfigured by unsightly scars, which are the inevitable consequences of the use of the knife. The risk from anesthetics is obviated and the patient cured without pain or shock. It is an established fact that in many skin diseases the application of the x -rays abolishes the necessity for operation. Those under treatment can also at the same time carry on their ordinary avocations. Many who fear the danger of operation hesitate and in this way the disease is spread and becomes more difficult to cope with. This is a general and broad view to take of the question and its lesions.

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724 MAIN STREET.

Treatment of Fresh Fractures of the Leg by Massage and Passive Movements.

By DAVID E. WHEELER, M. D., Buffalo, N. Y.

TEXTBOOKS on surgery inform us that from six to eight weeks are required for the repair of a fracture of the leg, but our patients tell a different story. By the time bony union is complete the troubles of the surgeon may be over, but those of the patient are just beginning. When the limb is taken from plaster, it is stiff, thin and weak, while edema of the skin shows its poor nutrition. These sequelæ are especially marked in peri-articular fractures. Our treatment has cured the bony lesion,—now the patient must cure the results of treatment; voluntary or passive motion must restore the function lost by immobilisation.

1. Read before the Erie County Medical Association, March 9, 1903.

A distinction must here be drawn between the weakness and atrophy directly caused by prolonged constriction and immobility, and that sometimes caused by the original traumatism, due to the laceration of muscles and the rupture of ligaments and tendons. But even this second kind of weakness is better treated by means directed to maintaining the nutrition of the limb, than by prolonged and absolute rest. Still more important is the distinction between permanent stiffness, caused by vicious union with exuberant callus, and the temporary stiffness caused by immobilisation during and after the repair of traumatic synovitis and the other common complications of simple fractures. Obviously our eagerness to prevent the temporary evil should not lead us to risk the permanent one.

So the problem confronts us,—can we prevent malnutrition of the soft parts without endangering the correct repair of the bony lesion? This question was answered in the negative, and the disagreeable sequelæ of immobilisation considered inevitable in fracture of the leg until Lucas-Championnière proved it possible to get good results without retentive apparatus. He discarded splints entirely, except for special indications, and treated most of his fractures from their inception by daily rubbing the parts and moving the joints about them. These movements were on no account to be voluntary by the patient, but passive and applied by the surgeon. He called attention to the facts that ribs and collar-bones healed rapidly with good functional results, that function was more important than form and that in delayed union it had always been considered good treatment to stimulate repair by rubbing the bone ends together. He reported good results from his treatment. The contraindications he gave were: (1) extreme tendency to malposition; (2) large blebs; (3) overriding; (4) fragments in such a position or of such shape as to easily work through the skin and compound the fracture.

Championnière claimed not only to be able to avoid all the sequelæ of fracture, but also to shorten the time required for bony union by one-third,—the same treatment which favored nutrition in the soft parts, improved the circulation in the bone and so hastened the process of repair. His results have been confirmed by the observers using his methods, although they have not been as extreme as he in discarding all retentive apparatus. Following Championnière's publication a number of surgeons, mostly German or French, reported good results from his method of treatment somewhat modified. The German surgeons gave their fractures one massage treatment immediately following reduction and then immobilised them for from four to fourteen days in plaster-of-paris, using as a guide to the duration of

immobilisation, the length of time needed to give sufficient union to prevent recurrence of deformity when manual support was substituted for the splint. As soon as this could be safely done the leg was massaged daily for from fifteen to twenty minutes, and at the same time passive motion cautiously applied. Between treatments the leg was kept in a Volkman or other similar splint. The results obtained in this way by the German surgeons were: patients able to walk with crutch or cane in, on the average, fourteen days; total treatment, average duration twenty-four days.

The French surgeons followed Championnière pretty closely, but for the most part used splints between the applications of massage. Caldwell and Wiener, of Chicago, and Woolsey, of New York, have reported good results from the massage treatment of fractures.

During a part of the time that Dr. Woolsey, as visiting surgeon on the first surgical division of Bellevue Hospital, was collecting the material for his papers, I was interne on the second surgical and, therefore, had a good opportunity to employ his method and to see as well as read of his results. Besides other cases he reports 47 of Pott's fracture, in which injury he finds massage especially indicated. His treatment is as follows: the fracture is reduced and put up in a Volkman splint or plaster-of-paris if that is necessary to maintain reduction. As soon as massage and passive movements can be borne without pain, if the deformity does not recur when the leg is gently lifted from the splint, he gives daily séances of massage, lasting for about a quarter of an hour. At the end of each active treatment he returns the leg to the splint. As long as the patient remains in bed the splint is used between sessions. In the 47 cases of Pott's fracture reported, the patients were confined to bed from 14 to 33 days, the average being 18 days. Generally, when first out of bed, these patients walked with a crutch and later with a cane, although exceptionally they could from the first walk freely without artificial aid. The average duration of treatment was 25 days, and at their discharge from the hospital all could walk without support and only five limped.

Dr. Woolsey always used sufficient apparatus to prevent malposition. If a solid plaster-of-paris splint was found necessary for the first 10 days, he found the results nearly as good as in those cases where massage was used from the first; but, if, on the contrary, massage was used for the first one to three weeks and it was then found necessary to place the leg in plaster for two weeks, the result was very little better than if plaster was used during the whole treatment. He advises, therefore, in case of doubt, complete immobilisation at the start.

While Dr. Woolsey was using this treatment on the first surgical division, I obtained permission from Dr. Hotchkiss, visiting surgeon on the second surgical, to try it in our wards. The cases treated comprised all the commoner fractures of the leg and the exact method used was as follows: if there was very little swelling or acute pain, as in fractures of the fibula alone,—massage and passive movements of the joints were instituted at once and repeated daily. The leg was immobilised between the massage treatments as long as there could be elicited a false point of motion. On the other hand, if there was considerable swelling, or the pain was acute, or large blebs were present, massage was deferred until these symptoms had subsided; rest, meanwhile, being secured by means of a Volkman splint. For excessive swelling an ice cap was used with or without a wet lead and opium dressing. The blebs were pricked and dusted with boric acid powder. Usually in from one to four days massage could be borne without much pain. The leg was then removed daily from the splint and treated for about 20 minutes by deep gentle pressure, with the tips of the fingers and the palm of the hand immediately above and below the point of fracture, but not directly on the solution of continuity. These massage movements were entirely from the extremity and towards the heart. At the same time the ankle- and knee-joints were flexed and extended. Great care was exercised that these manipulations should not be made with sufficient force to cause palpable movement at the point of fracture. Often at first it was impossible to remove the leg from the Volkman splint without causing deformity. In these cases the bandage was cut down daily and the front of the leg massaged, but it was not raised from its support, nor were flexion and extension practised until the formation of provisional callus was sufficiently firm to prevent movement of the fractured bone ends on one another during these manipulations.

At Bellevue, both on the first and second divisions, massage was performed by the nurses, but unless a nurse can be procured who is exceptionally familiar with fractures this should be done by the surgeon, or a competent assistant. Certainly no one should be trusted to massage fresh fractures unless competent to detect deformity, reduce it and apply the apparatus necessary to keep it reduced.

It was found impossible to maintain good position in some of the fractures with a Volkman splint, or any other splint disturbed daily. Therefore, these cases were kept in a permanent solid plaster-of-paris dressing until consolidation was far enough advanced to permit of massage without eliciting a

false point of motion. These were mostly fractures of both bones of the leg, in which injury early massage can only be used for those near the ankle and occasionally for transverse fractures of the upper and middle thirds.

Generally, in from one to two weeks from the time of fracture the patients were allowed to go about on crutches. When this was done the leg was protected not by a Volkman, but by a posterior plaster-of-paris splint; in Pott's fracture supplemented by a strip running from the instep over the outer border of the foot, under the sole and up the inner side of the leg,—Stimson's dressing. At first all cases were allowed and urged to walk with neither crutch nor cane as soon as they could do so without pain,—that is in about two weeks,—and were discharged from the hospital a few days after they could walk. They were, however, asked to return once a month for inspection. The later cases on the contrary, except fractures of the fibula alone, were not allowed to rest the weight of the body on the broken leg until the end of the fourth, fifth or even sixth week.

The cases treated were as follows: fractures of both bones of the leg, 22; Pott's fracture, 20; fracture of the fibula alone, 13; fracture of the tibia alone, 2. Total, 57.

I shall now review the results obtained in—(a) Fracture of the fibula alone; (b) Pott's fracture; (c) Fracture of the tibia, with or without fracture of the fibula.

(a) Fractures of the fibula alone were usually able to walk without pain in from 9 to 14 days. They were then allowed to do so and did not require either crutch or cane. They showed neither limp, pain, nor weakness,—function was completely restored and union firm in two weeks or even less. They were discharged from the hospital as soon as they wished. Many of them returned to report their condition after a month or more, and not one of those returning showed any untoward result from this early use of the leg.

(b) Pott's fractures were able to walk at the end of the second or third week and, although they limped somewhat when first using the leg, function was completely restored by a few days use. The early cases were urged to walk unaided as soon as they could, but of those allowed full use of the leg under four weeks some who returned for inspection suffered from recurrence of deformity and partial loss of function. From this the conclusion was reached that even under massage treatment, if a patient is allowed to walk on a Pott's fracture within two weeks of its receipt, he may get a deformed and crippled ankle. This weakening of the arch of the foot did not occur until the leg had been in use several weeks, and so might be easily overlooked

in hospital patients. On this account the later cases were not allowed to bear weight on the fracture, even although anxious to do so until the end of the third, fourth or fifth week. This delay is likely to be very irksome, since it is very hard for a man to hobble about on crutches several weeks after the cessation of all subjective symptoms, but it should, I think, be insisted upon, or the final result is endangered. Of the cases not allowed to walk until after the twenty-eighth day quite a few returned for inspection and not one showed recurrence of deformity, weakening of the arch of the foot, or any loss of function. The delay did not impair the functional result at the time of discharge from the hospital. Four or five weeks after the receipt of injury Pott's fractures walked home with no stiffness and very little weakness.

(c) *Fractures of the tibia*.—In these cases early massage was used only in fractures near the ankle or in those where the line of cleavage was squarely transverse,—that is, in those showing comparatively little tendency to overriding or other deformity. When of such a nature that they could be treated early by massage, they showed at the end of two weeks complete absence of pain, even on voluntary movements of the knee or ankle, or when the heel was struck a sharp blow. They refused to walk, however, saying the “leg felt too weak”, and on close examination a false point of motion could generally be elicited at the site of fracture. They were gotten out of bed, however, and went about on crutches; meanwhile, the leg was protected by a posterior plaster splint and massage continued. They were able and willing to walk by the end of the fourth week, but after seeing some cases of recurring deformity in Pott's fractures allowed to walk too early they were not allowed to do so until the end of the fifth or sixth week. After union is too firm to allow any false motion and walking is painless, at least one week should elapse before the patients are allowed full use of the limb.

None of this third class of cases walked before the end of the fourth week and not one who returned for inspection showed deformity sufficient to be noticeable, or to cause any impairment of function.

CONCLUSIONS.

1. Fractures of the fibula alone may be fearlessly treated by massage and passive movements from their inception, and those so treated may be allowed to walk two weeks after the receipt of fracture without compromising the final result.

2. In Pott's fracture and fractures involving the tibia more caution should be used. The patients will often require a solid plaster-of-paris splint for the first 10 days, which will, of course,

preclude the use of massage during that time. They should not be allowed to walk for at least a week after bony union is apparently firm. This will make the total time of disability from 28 to 42 days. At no time during treatment should any deformity be tolerated and our power to prevent deformity is a distinct limit to the applicability of this method of treatment.

3. The time required for true bony union cannot be much shortened.

4. The total time of disability is, however, materially shortened and the final result as to function is as good, if not better, than under strict complete and prolonged immobilisation. This gain is obtained rather by preventing sequelæ than by hastening union.

5. The traditional ideas concerning the amount and duration of immobilisation necessary to secure good union in fractures of the leg need revision.

Immobilisation is a distinct detriment to the patient, and no more of it should be used than is found in each case to be required to give correct apposition of the broken bone ends. As soon as examination shows that apparatus can be discarded without causing recurrence of deformity, this should be done without waiting to comply with any rules for the duration of immobilisation. In most cases the slight disturbance caused by frequent inspections of a fracture is beneficial rather than injurious.

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Fourteenth International Medical Congress.

From New York to Madrid and Return with Cook & Son.

By JEFFERSON D. GRIFFITH, M.D., Kansas City, Mo.

ON the afternoon of April 11, 1903, at 4 o'clock, the magnificent North German Lloyd steamship, Princess Irene, started up her propellers, never missing a revolution until daylight of the 20th. After a remarkably smooth voyage Gibraltar was reached,—that British sentinel, harbor for battleships, gateway to and from the Mediterranean Sea,—through which Tarik, the Moor, in 711 introduced Arabian refinement into Europe.

GIBRALTAR.

This spur of land, running south from the Spanish peninsula, is within 20 miles of the African shore. The rock on the north and east rises almost perpendicularly 1,500 feet, is punctured with almost innumerable port-holes, and its summit bristles with guns, over which floats the English jack,—an impregnable fort that has withstood all attacks since its first capture in 1704.

To an outsider, this fort should belong to Spain. Great Britain, however, has expended 50 millions sterling on this station, and is now putting in a sea wall for fleet protection, making it a safe harbor. It is questionable as to its affording any protection to the entrance of the Mediterranean Sea. Certainly, it is not the Dardanelles. Beautiful are the surroundings of the city that nestles on the west side of this rock, the mean temperature being such as to allow fruits and flowers to flourish continuously, rendering to the eye of the visitor an ever-changing feast coupled with ancient and grand scenery. The streets abound in soldiers (garrison about 6,000), Moors, Arabs, Spanish, French, Italians, and the omnipresent, industrious Yankee; and it is quite certain the latter is not there for his health. The stores abound in articles of merchandise made in London, Paris and New York. The entire population are consumers.

Here it was that we had the pleasure of an introduction to our most excellent guide, Mr. F. Piromali, of London. Fortunate are those to whose party he is assigned. Not for a single moment did he forget us, and at no time were we found wanting for anything that was possible, as nothing seemed too good for us to enjoy. We now found that characteristic of the people, which seemed to obtain throughout Spain,—“manana”,—no one seemed to be after the “worm”. “Half-past nine, Sir”!!! This was the time we were asked to be again at the dock with our hand luggage (how I hate that name!); of course being Americans we

were on time, and after standing (station house 4x6 feet) on the stone wharf for an hour and a half the nice little steamer took our party, now numbering about 50, over about five miles to the beautiful "Emerald Isle" of the Moors,—Algeciras,—the "Key of Spain".

This quiet little place seems to have been a bone of contention, as it was several times besieged,—taken, razed, and retaken,—by Moors, Alfonso XI., Mahomet II., and then Charles III., in 1760, by whom the watch tower on the plaza was constructed and used for observing the movements of his friend (?) the Briton. Just think of George, from the Moorish Castle, and Charles, from his watchtower, playing peek-a-boo, each watching to see that not one grain of sand blew too far on the neutral ground. Here we first came to observe the Roman Arch, in the construction of bridges and viaducts, although now very, very old, still perfect; the streets all paved with cobble stones and no passing vehicles; sidewalks very narrow; buildings small, all white, stone, rubble and Roman brick, covered with stucco; lower windows latticed with half-inch wrought iron "rajas", upper windows and doors balconied; not a sprig of green to be seen on the street, but, when the main entrances of houses (used for man and beast) were open, the court,—patio,—was always fresh looking, with blooming flowers and water. This characteristic obtained throughout the peninsula.

On crossing the bridge, spanning with one arch the old moat surrounding the ancient walled city, we met the ubiquitous beggar with the thickened, granulated, stenosed eyelid, and, of course, being anomalies, we were followed by one or more of the street gamins, these being principally senioritas, who called out with extended arm and open hand. The thought presented itself that here, as in "Twain's Cairo", would be a grand money-making place and country for our enterprising quack nostrum hawker to get rid of all of the Chicago canal water (filtered) as an eyewash instead of feeding the great centennial city with its microbes,—our theory for this prescription being the therapeutics of the future,—"the survival of the fittest". By the way, no American (and right here let me apologise for using the term American as applied to the citizen of the United States, as we found in Madrid the South American delegate very sensitive on this score) can travel in Spain without thinking continually of this great axiom. There is one marked, redeeming feature to all these small bathless residences,—namely, in every window, always upstairs, frequently on first floor, could be seen beautiful flowers. Heaven only knows what the blood-thirsty Spaniards would have been were it not for these softeners of human nature.

This place, in fact all of Andalusia, is celebrated for its beautiful women and oranges. As strangers, we can say that we ate with relish the latter, and did not have an opportunity of seeing the former. The Spanish woman has a sad face; she is undoubtedly a secondary consideration; a necessity not a luxury, and she knows it well. Here as elsewhere, in city and country, except Madrid and Granada, we found the poor, obedient, self-sacrificing, sober, sure-footed donkey, the beast of burden. He carries not only men (the women walk), but every other commodity that has to be transported,—namely, lumber, furniture, water, vegetables, dry goods, groceries, etc.; frequently under the hay pile one would have to look well to find the source of motion.

Here again we found a city of consumers, and the little shops, 6 x 8, replete with articles manufactured in our own country. Our good guide gave us, at the beautiful little hotel, a most delicious lunch at 1 P. M. After this we found in something of a hurry, following Dr. H., our comfort hunter, our first-class compartment, en route for our next stop, Ronda. On reaching the first station out the gendarme, well uniformed and armed with mauser and sword bayonet, was the conspicuous figure. His presence seems to be necessary,—or was more particularly in the past,—as the peasant and gipsy are not owners of land; hence, not positive integers, having very little or no national pride. These armed officials, too, are a necessary evil, even at present, as were not some of them (there being over 300,000 in the empire) ever present the Bandilli would soon demonstrate the actual necessity of the feudal system as in the past. These outlaws seem to have infested Spain until within the past few years.

EN ROUTE.

Our compartment was a comfortable one for this country, as we were blessed with a lavatory. The compartment would accommodate eight persons, but as soon as our party of five was installed our fumas began to give forth volumes of smoke, and, of course, no one else cared to come in. No bells or pilot on the engine and no conductor,—remember that this is certainly the best way on earth to travel,—that is, to have some one else, Cook & Son for example, take all care and responsibility,—always let the other man work,—especially as no checks are given for luggage. The railroad is certainly a well-laid one, and, although, a very light rail (50 lbs.) is used, it is heavy enough for the coaches. The trains are all mixed, freight and passenger. Our route was, at first, through a slightly undulating country, the track hedged on either side by century plants, making a most formidable fence, with every foot of available soil under the

highest cultivation,—oats, peas, wheat, grapes,—orchards upon orchards, as far as the eye could reach, of beautiful olives and forests of cork; the landscape dotted here and there with a little white house and yard full of flowers; the wide pastures, rich with clover and grass, covered by Andalusian cattle, fat and sleek; on the mountain side and again on the plain, the shepherd, with his long staff and highly colored blanket, always folded and thrown over his left shoulder, and the faithful dog, could always be seen.

As we approached Gaucin the speed of the train is checked by the grade and we are reminded of the approach of tunnels by some attachee tramping along on top of our coach, lighting an oil lamp in the ceiling of our apartment. The scenery is now that of chasms, gulches, mountains with small streams dashing along; out from tunnel to chasm and again the trout brook. At 9:20 P. M. we are again at our stop for the night,—Ronda.

RONDA.

This city is 2,500 feet above the sea level, is built on a rock of limestone, this being porous no dampness follows the heavy rains. This place seems to partake of the Moor, Roman and more recent Spanish. A few minutes walk from the station brings you to an enormous gulch, a dividing line (called "Tajo"), 200 feet wide and 300 to 400 feet deep, spanned by two rock bridges, one Roman, the other Spanish, the latter not more than 150 years old and the one arch at least 150 feet span. The river Gaudalevin rushes along at the bottom of this chasm with force enough to furnish all the power necessary for the flour mills, electric plant, etc. The oldest bull ring in the Empire is here built over the old Roman Amphitheatre, and here we see the remains of an old Moorish castle, showing a recognition of this as an important defensive point.

We would not leave Ronda without speaking of the wonderfully preserved remains of the immense, long Roman Aqueduct, which undoubtedly supplied the city with water. The arches are seemingly as strong and well preserved as if only a few years old.

About 9.30 A. M. (21) our train left for Seville, via Bobadilla. The entire route was at first through mountains then beautiful fertile plains, abounding in orange and olive groves and pastures, some of which were marshy, and here for the first time we had the pleasure of seeing that bird of beauty and grace, the stork, and an occasional pair of handsome quail pheasants, these having bright plumage.

En route we passed through Utrera. This place has been, in the long past, one of great importance, as the remains of old Moorish castles, some of which must have been immense structures, the old cathedral, magnificent in every way, testify; the traditional one owning the only piece of silver left of the thirty that Judas received—the feudal walls surrounding all. From here to Seville, almost all the way, our pathway lay through a valley, strewn with flowers, oranges and olives. Occasionally away to our left, surmounting the high rock on the opposite side of the Guadalquivir river, could be seen the ruins of old castles and monasteries. About 7 p. m. we were in Seville, taken at once by our guide (C. & S.) to the Hotel Madrid and given the very best accommodations that one could ask. The “barber of Seville” was found after dinner. He was clever with his razor, but oh! the chair! you can only appreciate this and the basin (with a scoop out of one side) of cold water after you have once used them. As a sign, the red and white pole is not used, but the basin with concave bite. Our American party went out in the rain to see the beautiful *senoritas* (*De Amices*) gracefully trip the light fantastic, with that subtle air of mystery, under an intoxicating Oriental atmosphere, saturated with the fragrance of the orange blossom, the vision feasting on forms more exquisite than *Venus de Medici*. We expected our hearts to be filled with a delicious sense of amorous delight and melancholy. We went, we saw, we retraced our steps!!!

Next day we visited the cathedral, one of the largest and most magnificent in the world, erected on the site of the old Moorish temple. This immense structure is admired by some of the most celebrated artists the world has ever known, and as you turn your eyes upwards, the gaze meets the most beautiful stained glass of all Europe, as clear and distinct as in 1100. The hour to visit the cathedral is at the Ave Maria, when the sun is low and its rays tremble on the walls in irises of gold; when the great painted windows stand out in a pale light alive with venerable forms of lawgivers, prophets and kings; the delicate curves of the arches melt into dim lines, and rays of yellow light pierce in like arrows upon a burnished ground; then the sculptured saints seem to take form and live, the flying pipes of the organs to glitter like angels' wings, the statues on the choir to murmur in a strange tongue; the many pictures which line the lower walls, to grow terrible in the half light; the sculptured forms of archbishops, long laid to rest in the repose of painted shrines, beside which deacons keep watch with silver croziers, to move; and, from the boundless gloom, aloft to fretted roofs, a burst of sound sweeps like an earthquake; round, harmonious thunders roll, and

deep-mouthed pipes speak with deafening shout; the giant organs (two in number) replying to each other as in dialogue of Titans; the human voice, exquisitely sweet, the rattle of triumphant drums, the shrill bray of trumpets, the clash and clamor as of a battle field; then the loud anthem ceases as suddenly as it began. The old ebony clock ticks out again from its dark frame; the dull drone of chanting priests uprisers from the choir, and the silent worshippers creep in and kneel.

On the southeastern corner of this immense building we find the watch tower (called Giralda), erected by the Moors, in 1196, as an observatory, the first on the continent; this towers far above the dizzy height of the old cathedral and covers quite a large area, as one could drive to the top by its broad winding road. The outside is beautifully ornamented by the Moors, to the upper tier, where are found the bells and cupolas, added by the Spanish, in 1568; changed thus into a belfry as the Spanish did not know its purposes. From the summit you have a grand view of this city of 400,000 souls.

The Alcazar, or house of Cesar, is certainly a well preserved castle, used for years by the Moors and since by the catholic kings. Alfonso "our boy", as the guide said, has his rooms here when visiting the old seat of government. The "Hall of the Ambassadors" is the most beautiful of all the dozens of compartments. It is "literally marble floor to mother of pearl and crystal roof one blaze of iris hues". The immense garden is certainly exquisite, the walls with their bright stuccoed paintings, fountains still active, and kiaks all speak the Moor, and every sovereign from Cesar down, has marked this delightful spot.

The streets are narrow, never following straight lines. The houses are rather attractive, light blue, pale green, pale yellow, or pale rose. Here, as elsewhere, the "patios" are a striking feature in the Sevillian houses. As described by one author,—a "patio" is a speciality, half Moorish, half Roman; not a court, nor a garden, nor a hall, yet all three,—being converted when necessary on account of heat, into an eating, sleeping place, or a regal place for entertainment. An open work wrought-iron gate shuts off the intruder, and in the midst of this area or patio is a fountain surrounded by banks of beautiful flowers.

This is certainly the most Oriental of all European cities; and is rendered historic by having given Rome three of its rulers,—Hadrian, Trajan and Theodosius,—the famous voyager Magellan, and the artists, Murillo and Valasquez. It is not only the birth place of the two master painters mentioned, but we find in the museum here, some of their finest works. A facsimile of the house of Pontius Pilate, built by a native of Seville, is one

of the most beautiful private residences. The Plaza del Toros, built in 1760, as perfect today as then, accommodates 12,000 spectators. The Torre del Oro (Tower of Gold), an enormous octagonal castle, built on the margin of the river Guadalquivir, for the purpose of receiving gold and trophies brought here by conquering heroes or explorers, and the palace of San Telmo, all constitute places of remarkable interest. On the evening of the 22d, at 7.30 o'clock, we took our sleeper for Madrid, arriving, after a rather comfortable sleep, the morning of the 23d.

THE CONGRESS.

On reaching our hotel, The Santa Cruz, being under the wing of Mr. Piromali, we had no fear in regard to accommodations. At once putting on our fatigue uniforms, we sought the dining-room for breakfast,—11 A. M.,—as en route from Seville, the dining car had only furnished eggs, coffee and rolls. Soon afterward we were directed, not by anyone from our own delegation who should have known something of plans and communicated the same, to the National Art Gallery and Museum, where we could register. I may as well mention here that the total registration and attendance was 6,981, the official delegates from respective nations being 474.

Before Spain was located by geographers, before the first stone of the bull ring was laid at Ronda, far in the Orient, a set of workmen became so confused in the construction of what would have been the most wonderful monument on earth, that all building was discontinued. To say that we found a second Babel on entering the registration room, but feebly expresses it; German, English, in fact, every dialect known was being expounded, not in whispers by any means, by an immense throng of hurrying physicians, seven-tenths of whom could not make themselves intelligible to the Latin at the window or behind the counter. Our credentials when presented were at once pushed back, and we were made to understand by a sign of disgust that these official papers were not necessary; but we were asked for the secretary general's receipt and on producing this we received the badge, program, invitations and all necessary papers. We asked for the bureau of information, but there was none; we asked for the official medical directory, but again, there was none; there were no tickets of admission to the opening exercises; all had been given out to anyone who chose to ask, with or without a badge, physicians or laymen. Let it be understood that we are not complaining, as it was plain to be seen that the committee of arrangements was looking for a purely Latin congress. It was

rare during the entire meeting to hear either German or English, and no interpreters were to be found.

Again, at the mass meeting held at the San Carlos Medical College on the morning of the 30th, not one-tenth of the visiting physicians were made aware of it; and it was so every morning at this general conference. Lisbon was chosen as the next place of meeting and the XV. will become practically another Latin congress, making two in succession,—an unfortunate circumstance indeed; but it is to be hoped that this almost sister city will profit by the omissions at Madrid. The hotel accommodations were limited at Madrid; what will be the condition in Lisbon? We hope the secretary-general will see that some space is given to the Germans, English and Americans. There are but few cities that can comfortably lodge 5,000 delegates, especially when one-third more must be added for wives and children.

On the afternoon of the 23d, at 3 o'clock, the formal opening of the XIV. International Medical Congress, by King Alfonso XIII., took place at the Royal Theater in the presence of the entire royal family, and one of the most magnificent audiences of more than ten thousand, made resplendent by the beauty of costumes, flowers, flags and jewels. As the King entered the royal box the palace band struck up the royal march, and at once the entire audience rose to its feet. Alfonso was dressed in a Field Marshal's uniform, everyone also being in full dress, military or civilian,—a magnificently dazzling sight. After listening to the address of welcome from the king by his exponent, as he never speaks in public, the president of the congress, secretary-general and mayor of the city,—each with an address of welcome,—the different nationalities were called upon to reply; and, when our beloved country was called, no one responded,—a want of organisation on the part of our delegation, or delegate supposed to be the organiser, if not the mouthpiece of the body. 'Tis an ill wind that blows no good, and the Spaniards seemed to think this a beautiful piece of courtesy on the part of the United States. In the evening at 10 o'clock, the mayor's palace was thrown open and a most beautiful reception was given. Here, again, the host failed to reckon on his guests; the tickets were short.

On the morning of the 24th, at 9:30, the congress, in 16 sections, came together in the different salons of the National Art Gallery and Museum, and unfortunately, for three reasons, these commodious halls were anything but working places for a scientific body: first, the walls were all hung, and every available inch covered, with masterpieces of painting (not considered so here because of want of age); hence, diverting, if not to the Castilian, surely to the Anglo-Saxon; second, the doors of the institution

were always open to the sight-seers, many of these of our own profession, who were constantly walking through from one salon to the other; third, there being no doors, the speakers in the next sections, right and left, could be heard, and the applause was frequently in the wrong place. The number of communications by title were 1,681.

In fact there were nearly 2,000 titles of papers sent in to the secretary-general, so it will be observed there was no lack of material for "neuron" exercise. The time allowed each paper was 20 minutes, and discussions were limited to 5 minutes. The great majority of valuable papers were read and discussed in Spanish, and, if there is one thing (besides wine, women, song and the bull ring) that the Spaniard is fond of it is discussion; and, although the entire discussion was unintelligible to most of us, there is no keener thrust you can give a Castilian than to get up with the American rudeness and leave the hall while he is speaking. As usual, a great many of the American "title writers" were conspicuous by their absence when called; this is rather characteristic of our countrymen. Again, quite a number "turned the barrel over" and reread from printed monographs.

Spain will astonish the medical man. The kingdom abounds in up-to-date searchers for medical and surgical truths. There is no doubt but that there was too much sightseeing, hence the sections were not as well attended as they should have been.

The Castilian is certainly the grandest of hosts. On the afternoon of the 24th, at 3 o'clock, a magnificent, full-dress reception of welcome by the king was given at the Royal Palace. The entire congress was passed in review by Alfonso, the Queen Regent, the Infanta and Infanta Isabel, each one, in turn, stopping and talking with two, three or more of each delegation. Ours, headed by Surgeon General O'Reilly, U. S. Army, and Colonel Senn, cared for and introduced by our bright and genial minister, Mr. Hardy, assuredly compared well with the others, as was evidenced by each of the royal party delaying so long and talking with quite a number of our delegates.

The young king is certainly very bright and much of a man, and we were all favorably impressed by his noble and unassuming manner, he even speaking cheerfully to the Cuban delegation, which was on our immediate left. The Queen Regent (Marie Christiana,—the Austrian) did not stop or speak to our neighbors. The Infanta has a strong, kind face, markedly unassuming, goes and lives with and is worshipped by all Spaniards; she is a true Mercedes. After the reception we were asked to the patio, and here had a feast for the eyes, in the \$10,000,000 worth of most beautiful tapestry, the largest collection in Europe. It is

useless for one to attempt a description of this beautiful palace. Friday night we were more than satisfied to rest, but we felt as though we were losing a great deal, as Madrid does not get awake until 11 o'clock P. M.

Saturday, the 25th was spent at the military section, from 9 to 12. In the afternoon we were given a drive out five miles to the Hospital Militar, and after visiting almost numberless "units", operating rooms, laboratories, supply rooms, etc., were highly entertained at a royal luncheon, followed by a most excellent hospital corps and ambulance drill, returning to the hotel about 6 P. M.; dinner and then again in full-dress uniform, we whirled off in carriages to the most princely reception, given by the Secretary of State. This reception was one of the most beautiful we have ever seen or attended. It would have been impossible for a Cesar in Rome's golden age to have entertained with more magnificence. Sunday morning the 26th, after our eggs, coffee and roll, we strolled to the old church, made famous by Isabella II., and at 10, crossing the Prada, entered the Gallery of Art.

Monday, 27th, we attended the Military Surgical Section at 9. Of the papers read in this section only one,—“The problem of tuberculosis in armies”, by Stricker, of Berlin,—occupied the attention of the section, it being replete with interest. At 1 P. M. an elaborate luncheon was given by the medical officers of Madrid to the section, and the afternoon was spent in the National University and Chemical Laboratory; here all the medical supplies are made for the army and navy. In the evening the section was invited to attend the opera, at the Theater Lyric.

Tuesday, April 28th, 9 A. M., section was called to order, Colonel N. Senn in the chair. We were called on for our papers, after which Colonel Senn read and demonstrated his new emergency package, characteristic in its simplicity and excellence and ease of application, being the best so far for use, and its adoption in our army should follow. Next, the colonel presented his new, beautiful, efficient and most thoroughly compact operating case, one of which every regiment in the U. S. Army should be supplied with, not larger than the old cartridge box, and instruments, in canvas, with extra folder ready for throwing into boiling water, and containing every instrument necessary for any operative procedure. This case he presented to the Navy of Spain. The afternoon was spent in visiting the Public Hospital and the Naval Museum and Hospital, having been invited and accompanied by Capt. John Redondo, of the Navy,—a man and a true soldier. This beautiful hospital is located north and west of the city, just outside of the old city walls, and on an elevation just

to the right of the entrance to the Royal Park, and from here you have a most beautiful view of the capitol. Colonel Senn, in the evening, entertained our good friend and Madris, Salvator, Capt. Redoudo, at a beautiful dinner.

April 29th, we had a good morning's section work, followed by a beautiful farewell luncheon and short speeches. In the afternoon the royal family entertained the congress at a most beautiful garden party in the palace gardens. A most delicious luncheon was served in the open, and champagne was a great deal freer than water. The King, his mother, aunt and sister were driven up in the royal carriage and alighted to the strains of six bands of music, one as fine as I ever heard, composed of 63 professors of the art. King Alfonso mingled everywhere in the throng of guests. The evening was spent by a great many of the delegates at the residence of our minister. April 30th, the general conference was held at San Carlos College of Medicine, and Dr. Howard Kelly, of Johns Hopkins, delivered the address for the United States. The sections then followed with the election of officers for the next congress, to be held at Lisbon.

The XIV. International Medical Congress is now numbered among the things that were, and is a matter of history. Let the good that men do live after them; let's bury the evils, looking upon the sins as those not of commission but purely omission.

The committees in charge have undertaken and accomplished satisfactorily to a great extent an Herculean task, and we thank them one and all, from the bottom of our hearts.

A few suggestions, however, we hope may not be out of the way. The rules for membership are entirely too lax; delegates should emanate from national organisations; the American Medical Association and the Association of Military Surgeons, are the only two bodies in the United States that should appoint delegates, and these should be sent in the proportion of one to one hundred members. Moreover, the official delegates alone should be allowed on the floors of the general assembly or sections. This, if attended to by properly appointed committees, will give to the delegation a standing and organisation, neither of which was attained at Madrid. The government should appoint from the Association of Military Surgeons official delegates. No layman should be allowed to register; no one should be allowed to register without filing with the secretary-general his papers or certificates from delegating body, these to be kept in the archives of the congress.

MADRID.

On account of its rarified air and interior location Charles V. was induced to vacate the older capitals,—Seville, Toledo and

Valladolid,—and fix his royal residence here, on the wooded cliff, high above the valley of the Manzanares. The city is not as markedly Spanish in appearance as the others of the empire. The streets are wider and the larger shops to a great extent resemble those of Paris. Large squares abound, planted with trees, ornamented with flowers and fountains. All of the large, fine buildings of the city were erected by Charles V. When the fires of the inquisition were lighted, the old gateway, then the principal one, Puerto del Sol, was located where now ten large Calles converge in the very midst of the city. This open square is where the fevered pulse of Madrid beats the fastest; though not even handsome, here you see and meet everybody; knock up against a Minister of State; brush against a well-shoed "torero", with his chignon of black hair, short jacket and majó hat; tumble across an ambassador or a match tray, or hitch yourself into the linen veil of a sister of charity, book in hand, coming from mass; jostle an estudiante, or a Castilian peasant in breeches, smelling of garlic, or face the domestic cook, with his basket of provisions poised on his head. At the Puerto del Sol merchant meets merchant, politicians scheme and demagogues plot. Here pronunciamientos are planned and the jeunesse doree gamble. The Puerto del Sol is the place to look for a friend, to avoid an enemy, hide from a creditor and a rendezvous for mistress or lover. If you are jealous you can stab your rival there, or be in turn yourself turned off by a blade; the crowd, like charity, covers all.

The royal palace, the museo and the armory, stand first in their classes in the world. The bull ring, containing the royal box, is the largest extant, seating 22,000 comfortably. The royal palace is one of the most magnificent in the world; the salons are beautifully furnished and the hall of the ambassadors is princely with its decorations; the ceiling painted by Tiepalo, "the majesty of Spain." It was in this room we were received. The picture gallery can boast of 62 Rubens, 53 Teniers, 10 Raphaels, 46 Murillos, 64 Velasquezes, 22 Van Dykes, 43 Titians, 34 Tintorettes, 25 Veroneses, 54 Breughels, 23 Snyders, and myriads of others. It is useless to speak of delight and bewilderment. One wishes for weeks of time. The royal armory was established in 1565. The collection is considered the most complete in the world, and the pieces have belonged to many of the most renowned warriors in mediæval and modern history. What a sight! You rub your eyes as you find yourself in the company of the Cid Campeadore, Ponce de Leon, Boabdil, St. Ferdinand, James the Wise, the great Captain Gonzalo de Cordova, Columbus and Charles V. The walls are sheeted with guns, swords, halberds, lances of tourney and battle, muskets, pikes and cross-bows, each with a

history; banners, trophies from Lepanto, St. Quentin, Naples, Mexico and Peru, from Cuba and the southern states; armed and armored effigies of all the early kings; Charles V. in the same massive armor in which Titian painted him at the battle of Muhlberg, with the same crimson panache on his helmet; Philip, his son, in the same armor, inlaid with gold and silver, the arms of England on his breast as painted by Titian; Philip studded with cameos and Philip in silver filagree; Ferdinando Cortes, who came to his death, forgotten, near Seville, in the curiass he wore in Mexico; Columbus in plain black and white suit; Hannibal and Cesar; the visor and jewelled sword of Isabel, the catholic, as she appeared before the walls of Alhambra; the halberd of Peter, the Cruel; the dagger of Pizarro in its steel sheath; the darendana of Roland, the Brave, upon which he spitted his enemies like larks; the immense broad-sword of Gonzala; two magnificent shields, chiseled, representing the Rape of the Lock.

THE BULL RING.

On Sunday afternoon, April 26th, at 4, we found ourselves on the stone seat of the bull ring, an immense amphitheater, seating with ease 22,000, and not a vacant seat, except in the royal box, this being occupied by only one person, Infanta Isabel, the Mercedes. This is one place where the Spaniard is on time, and nothing must interfere with the slaughter. This was evidenced by the fact that this was election day throughout the city, if not the empire, yet from 6.30 A. M. to 3.30 P. M. everybody was for the bull fight. Our experience will last in memory; the multitude of folk, eager and excited, making their way along Calle Alcalá, all seemingly emanating from the Puerto del Sol; all rushing to one place, aroused as nothing but the prospect of blood can stir them. And to stand and look down upon the seething crowd of 22,000 souls, all of one mind and desire, from the elegantly dressed *senoritas* and cavaliers, down to those who, perhaps, have had to pawn their shirts to be there!

This Spanish crowd has well been called seething; however, there was no boiling over, no riotousness, no one drunk, as the native drinks wine, is never boisterous, and "never full but just aplenty". In fact, it is astounding how decorous this huge mass of humanity is awaiting the longed for event. The president enters his palco or stage box, the signal is given, and forth comes the *Candrilla*. This opening ceremony is pretty and effective, headed as the procession is by a couple of caballeros in black velvet, riding black steeds; next two *espados*, one in yellow and violet and the other in gold and green, these being the heroes of the day; next half a dozen *picadores* in short cloaks and leather

leggings, plated with steel; now come the banderilleros, with bright silk sashes, short breeches and highly colored stockings; and the last of the procession, made up of four or five attendants leading mules, bedecked with plumes and trappings,—these for the purpose of dragging off the carcasses from the arena. The entire group now moves across the arena, salutes the president and breaks up. The picadores canter away taking up their respective positions at various points; the banderilleros find their red cloths; two cabelleros, that seem to be left behind, salute the president and the keys of the bull's den are thrown by the latter to them. Now, in a very few moments the band ceases its lively music and the first bull dashes into the arena, as though shot by a catapult.

THE FIGHT.

This masterpiece of brute life at first seems bewildered, rushing to right and left, chasing his tormentors over the barrier, and after seemingly clearing the arena of pedestrians, rapidly turns his attention to one of the picadores, mounted on a poor, unsuspecting blind-folded horse; and, although the horseman does his utmost, with a long pike, to turn his assailant aside, on he comes with lowered head, a peculiar digging operation, then a momentary upheaving and down goes the horse and man, apparently used up, if not dead. Now, the banderilleros divert the tortured animal by their red cloaks, thus giving the picador an opportunity to escape. Again, a shout is heard, the horse is helped up, and, although disemboweled, yet the picador mounts and the poor animal is lashed onward for another and, as we hoped, final assault. Unfortunately the picador has escaped without even being crushed by the horse's fall.

In a few moments the bull starts for one of the red cloak gentry, following closely over the barrier which he leaped, the bull clearing the same immediately afterward. Now the excitement runs high, and the ether is rent with wild cheers, mingled with hushed hisses. All the picadores have had their turn; or maybe the thirst for blood by the spectators has been satisfied for the time being. The president gives the signal and the picadores retire. The banderilleros enter the arena, their office being to stick into the shoulders of the bull three or four pairs of banderillas, which are ornamented darts, about two feet long, well barbed and exquisitely pointed, indeed, often very valuable.

This is a pretty sight to witness, if any part of the bloody orgie could be so considered, requiring great skill, agility and daring. The principal stands in front of the bull, and raises his arms as high over his head as possible, in a very defying manner. He then walks slowly forward, the bull makes a rush, and the man

quickly dodging to one side, pins in his banderillas simultaneously. Now there is a burst of applause if the effort is crowned with success; if, however, there is bungling or evidence of fright, he is unmercifully hooted and hissed. These performers become very much aroused by the voice of the multitude and vie in feats of daring. One will take his seat in a chair as the animal makes his maddened rush, jumping lightly up as the horns of the animal graze by, manipulating his darts in an unerring way that seems almost impossible; another, with wonderful nicety and precision, leaps clean over the brute's lowered head; another will seize the bull's flying tail, and swinging plant himself for a moment between the curved horns. The cruelty of the people not being satisfied with this torture, the cry of "fuego", "fuego", is raised and the banderilleros are at once provided with firework banderillas, half squib, half cracker, which, hissing and exploding in the side of the poor beast, is certainly the ne plus ultra of fiendishness.

Now the signal sounds again, and *The Actor*, the principal espada, steps out, greeted with wild applause; the one to finish the weird, bloody, strange scene, with his short Toledo blade and a red cloth. He walks forward to the bull with the nervous action of an athlete or fencer. Now the tumultuous throng is impressively hushed, eyeing closely every movement of both man and beast. The espada must play his victim in an approved fashion. Everyone now sees that the bull is markedly exhausted, still he is all pluck and makes head against his enemy, who, aided by his squadron of chulos, resorts to every method of irritation and punishment. Suddenly he stops, within a couple of feet, face to face with the fascinated animal; the man is now, evidently, on exquisite tension for a moment,—then the sword is buried to the hilt in the brute's neck between the shoulders. The one blow finishes the horrid spectacle. The bull staggers down on his knees and then falls heavily to the ground. The attendant now finishes by a stiletto stroke through the medulla and the espada, being greeted by deafening cheers, a beautiful bouquet and showers of other tributes, walks toward the president's box. A fiendish conjunction—butchery, flowers.

Now all is over; the band plays; the mules are brought in, harnessed to the carcasses that lie upon the arena and are driven off at a gallop; the sand is raked over the streams and pools of blood; the watering cart lays the dust, and everything is now ready for number two. Six animals and twelve horses were killed during the two hours' performance—but not a single man.

The second and fourth contests were the wildest and most picturesque, the former killing three horses in less than that many

minutes and clearing the ring of every living being. This accomplished, he walked completely around the ring, every few paces looking appealingly up at the hissing crowd as though asking—"Have I a friend anywhere?" The bullfight, thank Heaven, as a diversion, is steadily losing favor with the fair sex, hence its blotting out is assured.

GRANADA AND THE ALHAMBRA.

Leaving Cordova on the afternoon of the 1st of May, the same evening found our train in the station at Granada, a city of 75,000 people. To the tourist probably this is the most interesting city in Spain, situated on a lovely plain, 2,250 feet above the sea level. We were driven across the city in an easterly direction through the Puerta Real into the grounds of the Alhambra, traversing a winding boulevard, on either side of which we could hear, above the noise of the wagon and lashings of the driver, the rushing waters. A little farther, and on our left, towering against the star-lit sky, we could distinguish massive turreted walls. This was Irving's Alhambra. A few moments more and our vehicle pulled up at the very door of the Washington Irving, a nice, clean hotel, beautifully located on either side of the boulevard. Being well tired out we sought our rooms for sleep, certain that our dreams would be spiced with visions of adjacent wonders. On awakening we found our window overlooked the walls of the Alhambra and Irving's room, where the author lived for ninety days.

At nine next morning we were following our guide, and en route to the Puerta del Justicia, where we were surprised by seeing several streams pouring out from the walls through lead pipes, seemingly as good as when placed there in the XV. century. On approaching the gate one is reminded of the hand of Isabel, the Catholic, by the niche in the stone, just above the keystone of the Roman arch, in it placed the statue of the Holy Mother, and on either side niches filled with blooming flowers. The great swinging doors, 94 inches in thickness, of hardwood and iron interlacing, give fruitful evidence of the stubbornness of the garrison and vigorous use by the besiegers of catapult and crude cannon ball; however, this was not the place of entrance of the conqueror Charles's force, it having made a breach in the south-east bastion on the ground level just opposite the corner of our hotel.

The pride of Granada and the boast of Spain is the Alhambra, the ancient palace of the Moorish kings. The magnificent ornamentations of this celebrated time have made it an everlasting memorial of the talent and exquisite taste of its builders; it stands unrivaled, defying pen pictures, even by Irving, in the gorgeous

splendor of its halls, and up to this date its decorative art has never been paralleled,—we can only say: enjoy with Arabian Nights, fantastical mental creations; proceed with ever-increasing and appalling wonder, from the Puerta delos Carras across the great square to the modern entrance, thence to the Patio of the Fish Pond, Court of the Lions, Hall of the Abencerrages, Hall of Tribune, Hall of the Two Sisters, Boudoir of the Sultan Lindaraxa, overlooking a beautiful garden, Moorish baths, Hall of the Camas, the resplendent Hall of the Ambassadors; Halls of the Palace of the Walies, ancient chapel, with the Koran now the Host facing the east. Next we visited the Palace of Charles the V. and across the great square to the Tower of the Vela, or watch, with its small portals, off from the winding, well worn, marble steps, leading to halls of Calcutta. From its summit is a magnificent view of the plain of Granada with the city at your feet, bisected by the Darro and Genil rivers, the yards resplendent with every tropical fruit while, in turning around, your eye meets the snow and glaciers of the Sierra Nevada mountains.

Under the Moors, Granada numbered 500,000 inhabitants. The houses of the old city looked markedly eastern, many of these being brilliantly painted, and the streets narrow and winding. In the beautiful cathedral is the Capilla de los Reyes, the burying place of Ferdinand and Isabella and the remains of Joan of Arc. These sepulchres are the most magnificent in the world.

We left this beautiful place on May 3d at 8.30, wishing for a stay of at least two weeks or more, and for 50 miles no one spoke, except to ask for a match to enable a stronger pull at his cigar,—all absorbed in thought. We arrived at Algeciras at 10 o'clock p. m., then crossed to Gibraltar, went to the hotel and were soon asleep, dreaming of our start for home, as we were to sail next morning.

GRAND AVE. AND 35TH STREET.

The Physician's Electrical Outfit and its Daily Use.¹

By JOSEPH C. CLARK, M. D., Olean, N. Y.

IN READING this paper upon the electrical outfit and its daily use, I wish to give warning that I have no new discoveries to present, and no startling cures with which to arouse your doubts. My idea is to interest the sceptical, to encourage the doubting, and to add moral support to all those who have been using elec-

1. Read at the annual meeting of the Medical Society of the County of Allegany, June 13, 1903.

tricity as an aid to their skill in treating medical and surgical conditions. Twenty-five centuries ago the Phœnician voyagers, who sailed upon the desolate shores of the Baltic Sea, brought back a substance greatly prized by the ancients for its fair color and transparency. It was amber or electron. But to Thales, the Benjamin Franklin of Miletus, it possessed a mysterious value. He discovered that amber, when rubbed, had the power of attracting to itself various light articles, as if endowed with life. His discovery was the first step in the great science of electricity. The centuries passed, and not until the XVI. did any new developments of importance take place. The improvements and advances made in the uses of electricity recently, are such as to entitle the XX. century to be called the era of electricity, and we do not think the physician alone, of educated men, should remain isolated from the general advance, or lag behind in this great branch of scientific thought and practice.

A noted Englishman, Edward Owen, recently made the statement that "the medical use of electricity had fallen largely into the hands of quacks". "This might have been said truthfully 25 years ago", replies Dr. Rockwood, of New York, "but not now, because there are hundreds of reputable and able men, both here and abroad, who fully recognise the influence of the various methods of electrification over general and local nutrition. As to those who have no knowledge of electricity, and so have no faith, so much the worse for them". The trouble is the *x*-ray and static electricity have been lauded too much as cure-alls to satisfy rational medical conservatism.

The proper selection of apparatus and electrodes is important to the physician, in order to afford his patient all the benefits of this variable and effective form of electricity,—galvanic batteries from two dozen fruit jars, with attachments, are as effective, as storage or dry-cell batteries. But the dry-cell battery's reputation is fully established, having been adopted by the United States Government; it insures compactness and durability, is always ready for work and is free from liquid. The advantage of a current controller is very evident; all the cells work together and at once; under the old method some cells naturally gave out sooner than others; again, under its influence there is no shock to the patient in increasing the current, which is always completely and simply under control, and this advantage in certain nervous diseases is preëminent. A milliampèremeter is always to be desired, to intelligently measure the galvanic current, which seldom, if ever, should be given above 10 milliampères, nor for longer than 10 minutes. The dry-cell faradic battery is compact, always works, is easily changed when cells show fatigue, and as

far as my investigations go, is all that any practitioner needs. This current is safe and never is followed by reaction, like the galvanic battery which will often give a patient a decided nervous time if overdone in its application.

Regarding the static apparatus, my preference is for 10 revolving plates and a motive power, preferably a water motor, with which the operator has the apparatus under thorough control, but which is not the case always with an electric motor. The electric motor must run at full speed always, and the *x*-ray developed must of necessity make a soft tube hard very soon. This can be controlled somewhat by having a tube with a movable target, but even then the life of a tube is much shortened.

Some outfits are made to develop large currents by being turned by hand,—namely, the Wagner mica plate, a very elegant apparatus, and I am not certain but in a few years mica plates will supplant the glass wheels. All depends upon their durability. A static instrument that sparks across in the case is imperfect and should not be accepted until the defect is remedied. One should know his static machine as well as he knows his horse, and not be afraid of it; he should master its mechanical details and so be ever ready for the off days that every good static indulges in, in every day practice. The poles of the static current have a common effect. The usual pole connected with the platform is the negative.

Let us dissect out the sciatic nerve at its exit from the pelvis and leave it connected with the leg below. Now apply a positive electrode to the nerve where cut, and an indifferent electrode to the nerve as it turns around the head of the fibula, then connect it to a galvanic, faradic or static current, and an energetic contraction occurs; a much more powerful current is necessary if the poles are applied without regard to the nerve supply of a muscle. If the positive pole of the galvanic current is attached to the nerve above, and the negative below, when the closure of the circuit occurs, the strongest contraction takes place at the negative or cathode pole; so, upon opening the current the strongest contraction occurs at the anode or positive pole; the reverse of this occurring constitutes the reaction of degeneration of Erb.

The physiological or functional properties of galvanic, faradic and static electricity are very much the same, yet in my experience results are best when I keep the idea of galvanic for nerve trouble and adhesions, faradic for muscle and nutrition, and static for both. It has been claimed that the negative pole retards nerve degeneration and the positive accelerates it. The negative pole dissolves exudates and exerts what may be termed reabsorptive action. I have a decided preference for the negative pole,

and the dissolving action of the negative pole is most marked in the use of bare electrodes like needles and sounds. The action of the positive pole is caustic or astringent, depending upon the strength of the current. The negative pole produces softening and relaxation, and stimulates absorption of effete products.

There are many diseased conditions of the human body very much benefited by the use of electricity. I will consider a few from a personal experience standpoint, and some from reported cases. First, we have paralysis, local or central, or partial. In either condition the muscles show a marked progress toward loss of tone, and flabbiness. This can be prevented and tone built up by the use of either the galvanic, faradic, or static currents. The degeneration of local nerves can be proven by our galvanic test. Pain due to nerve, muscle, or any cause can often be very much relieved, if not stopped entirely. Here we may include nervous neuralgia, rheumatic and inflammatory conditions, recent sprains, and lumbago. Fibrous ankylosis and tendons attached to sheaths are very much helped by any one of the three currents and more particularly by the galvanic with a salt solution upon the anode or positive pole.

The many uses of static electricity in combination with the x-ray are increasing monthly, and we find the static current in neurasthenia is as good as any agent known, in the treatment of many of these unfortunate conditions. The tonic effect of static electricity does not exceed that of the galvanic or faradic; the careful and thorough use of the galvanic and faradic current constitutes one of the greatest tonics and stimulants that can be brought to bear upon the human system. It awakens torpid conductivity of every nerve thread in the body and its greatest benefits can be demonstrated in the aged in whom loss of superficial sensation can be proved, only to quickly return after a few treatments by the galvanic and faradic currents. The galvanic current should be used never longer than ten minutes to begin with, for fear of reaction, such as chills and nervousness. But it is some trouble to disrobe, and the exposure often deters the medical man from using these currents. The static apparatus here comes in as a quick and convenient method of giving electricity, and, as an enthusiastic patient once remarked, "it is good for whatever ails you".

While the constant current has proved so very useful to the medical profession for diagnosis, for stimulating nerve and muscle, for cauterisation, and for electrical endoscopy, we must not neglect its cataphoric effect by which remedial agents are diffused through the tissues and fluids of the body, to improve nutrition, to produce anesthesia, to relieve pain, to destroy germs,

to modify morbid processes, and to make soluble chemical combinations with deleterious substances which collect in the organism. The medicines used are the iodides of potassium, sodium or lithium, normal salt, iodol or diluted tincture of iodine, upon positive or anode; chloride, benzoate or citrate of lithium, all very soluble, in gout or rheumatism. These remedies are lauded very much in the treatment of Graves's disease or exophthalmic goitre and there must be something in this claim, for I have used, and always do use, the galvanic in goitre with good, and often marked results. Here the positive pole should be placed over the gland or any enlarged gland for five minutes.

The uses of the *x*-ray in diseased conditions has been very much overworked in my judgment. There is, however, one condition that yields to its influence, and that is the chronic superficial forms of lupus. The deeper forms will often apparently heal only to reappear. The indications for its use are: to relieve pain, to lessen edema, to promote absorption, to act as a parasiticide, to act as a bactericide, to cause the destruction of malignant growths, to limit the extension of malignant growths, to prevent the recurrence of malignant growths; these are but some of the indications for the employment of this agent. From a long list of reports I have collected the following *cures*,—lupus, superficial; lupus, deep; tuberculosis of the glands, lungs, skin or bones; epithelioma; goiter; rodent ulcers; eczema; carcinoma; osteosarcoma; neuralgia of the ovaries; removing moles, and other similar cures. In conclusion, I hope I have interested the sceptical, encouraged the doubting and given moral support to all those who use electricity as one of the many methods in their practice of the healing art.

SOCIETY PROCEEDINGS.

Lake Keuka Medical and Surgical Association.

REPORTED BY W. W. SMITH, M. D., Secretary, Avoca, N. Y.

The fourth annual meeting of the Lake Keuka Medical and Surgical Association was held at Grove Springs, August 11 and 12, 1903.

The president, DR. ARTHUR W. BOOTH, of Elmira, took the chair and called the meeting to order at 12 o'clock noon, Tuesday, August 11, after which the minutes of the meeting of 1902 were read and approved.

The treasurer's report showing a balance of \$14.00 in the treasury after paying all bills of 1902, was presented and approved.

The president then presented his annual address entitled, Surgical intervention in typhoid fever perforations.

A recess for dinner was taken and the association convened at 2 o'clock p.m.

The president's address was discussed by Henry R. Hopkins, of Buffalo; H. P. Jack, of Canisteo; H. D. Wey, of Elmira; C. L. Stiles, of Owego; Ross G. Loop, of Elmira, and John D. Miller, of Corning.

A paper was read by William Warren Potter, of Buffalo, entitled, Some diseases of the respiratory tract from a pension examiner's viewpoint.

The discussion was opened by C. L. Stiles, of Owego, who was followed by Warren L. Babcock and I. P. Smith, of Bath; Geo. M. Case, of Elmira; R. P. Bush, of Horseheads, and closed by the author.

The president appointed an executive committee, as follows: C. S. Parkhill, Steuben; Henry Flood, Chemung; M. L. Bennett, Schuyler; C. E. Doubleday, Yates; S. R. Wheeler, Ontario; C. L. Stiles, Tioga, and F. R. Driesbach, of Livingston.

A paper then was read by Wm. B. Jones, of Rochester, entitled, Prostatic hypertrophy and similar conditions.

The discussion was opened by Warren L. Babcock, of Bath, and closed by the reader.

The next paper was read by Ernest Wende, of Buffalo, on Ointments and pastes.

A paper entitled, Blood examination as an aid to diagnosis, was read by Clayton R. Haskell, of the Soldiers' Home, Bath, which was discussed by Ross G. Loop, of Elmira, and C. L. Stiles of Owego.

A paper was then read by H. D. Wey, of Elmira, subject, Pancreatitis. It was discussed by C. W. M. Brown, of Elmira; Lewis W. Rose, of Rochester, and closed by the author.

Henry R. Hopkins, of Buffalo, then read a paper entitled, Malignant endocarditis; which was discussed by H. R. Ainsworth, of Addison; C. W. M. Brown, of Elmira, and the discussion was closed by the author. A practical demonstration of making a diagnosis of prolapsus of the kidney, was the title of a dissertation by Augustin H. Goelet, of New York. The paper was discussed by H. P. Jack, of Canisteo, and closed by Dr. Goelet.

A motion was made by Dr. Wey and seconded by Dr. Jacobs that the question of changing the date of meeting from August to July be referred to the executive committee.

A recess was taken at 6 o'clock until Wednesday, August 12, 9.15 a.m.

The first paper read at the morning session was entitled, Perforative appendicitis, by A. L. Beahan, of Canandaigua, which was discussed by John D. Miller, of Corning, and the author.

The next paper was read by John O. Roe, of Rochester, entitled, Diseased tonsil considered as a seat of infection, the causation of rheumatism and allied diseases. Paper discussed by R. P. Bush, of Horseheads; G. M. Case, Elmira; Sargent F. Snow, Syracuse; P. K. Stoddard, Prattsburg; William Warren Potter, of Buffalo, and closed by the reader.

A paper was read by Sargent F. Snow, of Syracuse, entitled, Free drainage and ice in the early stage of mastoiditis. Discussed by Henry Flood and Geo. M. Case, of Elmira; John O. Roe, of Rochester, and closed by the author.

A paper was read by C. S. Greenleaf, of Rochester, entitled, Therapeutics of the Röntgen ray, which was discussed by Frank W. Ross, of Elmira; John O. Roe, of Rochester; P. K. Stoddard, of Prattsburg, and in closing by the reader.

The next paper read was by Geo. M. Case, of Elmira, entitled, Ophthalmia neonatorum, and was discussed by R. P. Bush, of Horseheads.

The executive committee reported the following: Resolved, that the time of meeting of the Lake Keuka Medical and Surgical Association hereafter shall be on the Thursday and Friday occurring nearest the first full moon of the month of July. Carried.

The committee reported the following nominations for officers for the next year: president, A. L. Beahan, of Ontario; vice-president, P. L. Alden, of Steuben; secretary and treasurer, W. W. Smith, of Steuben. The nominees reported by the committee were elected. A committee of which Dr. Stiles was chairman was appointed to confer with Dr. W. W. Potter in regard to printing the papers of the meeting in the *BUFFALO MEDICAL JOURNAL*. Attendance, 75. Adjourned sine die.

PROGRESS IN MEDICAL SCIENCE.

Pediatrics.

CONDUCTED BY MAUD J. FRYE, M. D., Buffalo, N. Y.

A NEW SIGN OF PLEURITIC EFFUSION IN CHILDREN.

KELLEY (*Archives of Pediatrics*, October, 1902,) calls attention to the well-known fact, that a child ill with pleurisy prefers to lie upon the afflicted side. With the accumulation of fluid he has

observed that the child almost invariably prefers to turn and lie upon the back or to be propped up high in bed. He regards this instinctive changing of position as a sign of effusion, probably of considerable bulk. Sometimes following the emptying of the pleural cavity by aspiration the patient turns again upon the affected side to return to the dorsal decubitus if the fluid reaccumulates.

ANTITOXIN IN DIPHTHERIA.

KERLEY (*Archives of Pediatrics*, October, 1902,) reports 159 cases of diphtheria, 103 treated without antitoxin with 60 deaths, and 56 with antitoxin with 4 deaths. He formulates the following rules for the giving of antitoxin:

With visible membrane inject at once and take a culture.

In croup, inject if there is inspiratory and expiratory obstruction.

The patients should be seen at 12 hour intervals.

Reinject in 12 hours if the patient is not improved, or if improvement is not marked. If continued improvement does not follow reinject at 12 hour intervals until the membrane disappears.

Dosage: 2,000 units for a child under 1 year of age, the amount to be repeated if necessary. Three thousand units for a child over 1 year of age, the amount to be repeated if necessary.

ANEMIA OF CHILDHOOD.

HOLLOPETER (*Jour. Am. Med. Assn.*, January 31, 1903,) calls attention to certain frequently overlooked factors in inducing the anemias of childhood,—namely, primary dentition, dental decay, nasal stenosis and mouth breathing, and eye strain. He urges physicians to have in mind these causes in dealing with young patients.

HEART DEPRESSION FOLLOWING ANTITOXIN.

HOLLADAY (*Virginia Medical Semi-monthly*, December 12, 1902.) reports a case of severe heart depression following the use of 500 c.c. of diphtheria antitoxin as an immunising dose. The patient was a male, aged 26 years. He became faint, cyanotic, pulseless at the wrist, the extremities being perfectly cold and covered with chilling perspiration. He complained of feeling as though a constricting band was forged around his chest. Under appropriate stimulation he slowly rallied. The physician had just administered to himself the same dose of antitoxin from the same bottle without untoward effect.

RETROPHARYNGEAL ABSCESS IN INFANCY.

MORSE (*Jour. Am. Med. Assn.*, January 31, 1903,) discusses this condition. Retropharyngeal abscess is always preceded by retropharyngeal adenitis, the symptoms of which are very similar to nasopharyngeal catarrh. The fever is slight at first and inspection shows nothing definite. The enlarged nodes are easily felt. Suppuration when it occurs, usually develops in from 5 to 6 days. The abscess is in the lateral wall rather than in the back of the pharynx. With the advent of suppuration the temperature usually rises and becomes more irregular. There is unwillingness to take food or difficulty in swallowing. If the abscess is in the upper portion of the pharynx the cry is nasal and nasal respiration is chiefly disturbed. The mouth is kept open and the breathing is snoring and snuffling. If the abscess is low down the cry is laryngeal and the respiration is stridulous, like that in laryngeal spasm or stenosis. In these cases the respiratory murmur is diminished locally and many moist râles are heard. These may be due to a complicating bronchitis, but are usually the result of interference with respiration. In acute cases the head is held in a characteristic position, the neck extended, the head turned to one side. Swelling of the lymph nodes at the angle of the jaw may be very marked. In the majority of cases the tumor is visible but not infrequently, if low down, it cannot be seen. It can always be felt, although if low down the finger must be introduced deeply. The abscess is felt as a tense and elastic or a fluctuating tumor. If a simple adenitis be present the lymph nodes are felt as hard masses, round or oval in shape, and varying in size from a pea to that of a large bean. The examination of the throat is best made with a tongue depressor and not with a gag.

The treatment advised is poulticing to hasten suppuration. Open the abscess as soon as pus forms. The internal operation is preferred by Dr. Morse. The child is held in the upright position, being tipped forward the instant the abscess is opened. The abscess should be squeezed once or twice a day to keep up drainage and to prevent the opening from closing. Repeated incisions are sometimes necessary. Use an antiseptic mouth wash.

Therapeutic Notes.

CONDUCTED BY NELSON W. WILSON, M. D., Buffalo, N. Y.

ARSENIC IN TUBERCULOSIS.

Le Journal de Medicine de Paris, in an extensive article on tuberculosis, lays considerable stress upon the use of arsenic in the early stage of the disease and in the chloro-anemic forms com-

mon in young women. The best way to administer it is with the hypodermic needle from 5 to 10 centigrams to the cubic centimeter being given once a day. When given by mouth it is best to administer it in concentrated form:

℞	Cacodylate of soda	0.40	gr. vii.
	Distilled water	10.00	℥ii. ss.

If a pill is preferred it would be best given thus:

℞	Cacodylate of soda	0.025	gr. 1-3
	Ext. gentian	10.0	℥ii. ss.

For one pill.

In some cases the stomach will be so sensitive that these prescriptions cannot be borne. In such cases administer by rectum:

℞	Cacodylate of soda	0.40	gr. vii.
	Distilled water	180.00	℥vi.

Directions: Inject 5 c.c., twice daily.

Generally speaking the treatment should be intermittent, hypodermics daily for 8 days and suspended for 8 days; injections 2 or 3 times weekly.

FOR ACUTE ALCOHOLISM.

VERY often in the course of an everyday practice one receives a call from a gentleman—or otherwise—who is suffering from acute alcoholism. He wants to be “fixed up.” J. M. Anders gives such cases this:

℞	Bromide of soda	30.0	℥i.
	Tr. capsicum	4.0	℥i.
	Tr. digitalis	2.0	℥ss.
	Simple elixir to make	60.0	℥ii.

Mix—Dose: Teaspoonful every 2 or 3 hours in water.

IN BOTH KINDS OF HEMORRHOIDS.

FROM Paris comes this formula for external hemorrhoids:

℞	Chrysarobin	0.8	gr. xii.
	Iodoform	0.3	gr. v.
	Ext. belladonna	0.6	gr. x.
	Vaseline	20.0	℥ v.

For the more retiring type of hemorrhoids, the internal, this is best:

℞	Chrysarobin	0.08	gr. i 1-3
	Iodoform	0.08	gr. i 1-3
	Ext. belladonna	0.01	gr. 1-6
	Coca butter	2.00	℥ ss.

After using for a few days pain and hemorrhage disappear and in from 3 to 5 months the hemorrhoids have entirely retracted. Before each application of either of the above there should be thorough disinfection with a solution of carbolic acid.

Genitourinary and Syphilitic Diseases.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

BACTERIURIA.

JANET (*Ann. des Malad. Organes Genito-urinaires*, No. 3, 1903). Urinary infection may be due to external and internal sources. Bacteriuria of external origin begins as an inflammation of the bladder mucous membrane, due to bacteria, usually the colon bacilli, ordinary bacilli or cocci. Prognosis is good in the absence of ureteritis and pelvitis. The treatment is bladder washings and instillation of silver salts. Bacteriuria of internal origin is obscure in origin and rebellious to treatment, since its cause is continuous. Bacteriuria of internal origin may be due to the proximity of an infected organ, or the infection may be delivered by means of the circulation. It is generally due to cocci, sometimes to the colon bacillus.

Bacteriuria from indirect contact or proximity, follows prostatic infection or a vesiculitis, which may repeatedly infect the bladder. It is needful to know whether or not prostatitis be the cause or effect of bacteriuria, since microbes eliminated through the urine may cause urethritis, if these bacteria be infections to the urethral membrane.

To determine whether bacteriuria is due to infection of the lower urinary tract or the kidneys, wash the bladder, and the urine will show but few or no bacteria; if it be renal, the urine will still show abundant germs.

The treatment of vesical or prostatic bacteriuria is local, and consists of lavage, massage, instillations and disinfection. Urotropin is especially valuable, together with benzoate of soda, if the urine be alkaline.

Bacteriuria of internal origin may arise from the rectum, intestines and the genital and urinary organs, and is more common than is usually believed to be. Bacteriuria through the blood is typified by the urinary infection of typhoid fever. Diagnosis of this form is very difficult. It is characterised by the evolution of a series of paroxysms, accompanied by fever.

Membranous enteritis may cause colon bacillus to appear in the urine. The persistent cystitis of constipated women is undoubtedly due to the colon bacillus. The route taken by the bacilli

is unknown. Urinary remedies are useless. Milk diet, purgation, normal salt solution in enema are recommended. Treatment to be kept up for three months. Urotropin is the best internal remedy—twenty grain doses three times daily. Keep urine acid. Patients should be tested for idiosyncrasy before giving large doses of urotropin.

THE MECHANICS OF MERCURY IN THE TREATMENT OF SYPHILIS.

THOMAS W. MERRILL (*The Atlanta Journal-Record of Medicine*, March, 1903,) says the use of mercury in the treatment of syphilis is very ancient, the first were the Chinese ages ago. It is known as a specific and only a charlatan or ignoramus would deny its preëminence in syphilitic therapy. Still there is a wide difference in the methods of its use and the choice of the form to be used.

The pathology of this disease is exceedingly simple and consists solely of "an active proliferation of the normal germinal cells of the parts." The virus of syphilis produces a stimulating effect on all the cells of the economy, some parts being influenced more than others and such parts proliferate very rapidly. The lymph glands are first attacked and enlarge. It travels the lymph channels on through the thoracic duct the subclavian vein and, becoming absorbed, affects all the tissues of the body. There is no inflammation, the swelling is due to the increased number of cells and not to their swelling. The glands are hard and dense, not much enlarged and remain enlarged after the disappearance of the chancre. The skin eruption is due to the proliferation of the epithelial cells.

Proliferating cells block the lymphatic channels, disturbing their function, the proliferation goes on and the masses of cells not being carried off make their appearance as gumma in the tertiary stage.

Syphilis is as much a self-limiting disease as measles and mercury has no antitoxic action upon syphilitic virus. Mercury produces its results mechanically, by clearing in its passage the lymph channels. Iodide of potassium increases the stimulation caused by the virus and does harm in the active stages of this disease, while mercury clears the channels and maintains their function. The globules of mercury in their passage through the lymph channels carry forward the detritus and the function of the channel is preserved. The finer the subdivision of the mercury the greater is its action and the more thorough are its results. Under the microscope the globules are found crowding the finest channels. The finer divided forms are more absorbable, hence preferable.

The protoiodide is the most used and the most useless. Dr. Julien says that the protoiodide is the father of stomatitis. This iodide will produce an eruption like syphilis. Its action is uncertain—a reaction has set in and iodine compounds are under the ban. The blue ointment by inunction is the best. More mercury can be given in the form of calomel and blue powder than in any other way, hence they are the best. Clinical observations have demonstrated that the finely divided milder forms of mercury are the best. Where the syphilis is dead iodide may be used to clear up the debris.

ABSTRACT.

Cure of Anal Fissure Without Operation.

S. Lewis, of Brooklyn, (*Medical News*, May 30, 1903,) reports eight cases and says the following regarding the after-treatment:

In contradiction to one of the leading authorities (Gant, *Dis. of Rectum and Anus*, p. 124), I am amazed to find the "severe pain and tenesmus" following the use of suppositories absent in my cases. I ascribe this: (1) to the special action of the permanganate and, (2) the satisfactory shape and consistency of the suppository employed, and care in its use. I have discarded a former favorite (a combination of Peru balsam and iodoform) and employ a suppository sold under the name of *anuso*. This affords an absolute uniformity of shape and consistency and presents a more astringent and stimulating action on the fissure and on hemorrhoids, if present. Best of all, it pulpefies the stool, which is allowed to be passed daily, a much simpler method than that of Boas, who stops the movements for a week or more. In my worse cases I have inserted the suppository myself or instructed a competent nurse. It should be employed night and morning, warmed till slippery, then gently pressed against the anal orifice on the side opposite the fissure until the sphincter relaxes and the suppository slips in. In most cases it can be inserted by the patient. I cannot feel that ointments, as recommended by Gant, or powders (Boas), could be relied on to reach the involved area if applied by the patient. One suppository is ordered night and morning, the usual dietetic and medicinal treatment of constipation prescribed, and patient told to report in two days. Severe cases are told to rest as much as possible, reclining. The worst are confined to bed.

In every one of my cases the next stool has been loose, mixed with products of the melted suppository and marked by two or three minutes of smarting in cases in which for days and weeks,

even months, preceding the patients have after every stool rolled in agony, lasting sometimes two hours.

Condition at next treatment: spasm and inflammation greatly lessened, ulcer covered by clean granulating area. Treatment as before, but cocain omitted, patients to report in four days, or sooner, if any pain exists. At third treatment, suppositories may be reduced to one daily, at bed-time.

HEMATEMESIS FOLLOWING APPENDICECTOMY.

George Ryerson Fowler, (*Brooklyn Med. Jour.*, July, 1903,) reports a fatal case. The occurrence of gastric hemorrhage has added another to the already long list of grave sequelæ of appendicitis. Whether this hemorrhage depends upon the toxic effects of septic bacterial products which enter the circulation and produce necrosis of the cells of the gastric mucosa, this in its turn being followed by ulceration due to the digestive action of the gastric juice, as claimed by Nitsche, or upon embolism of the vessels of the gastric mucosa, as shown in the case herewith reported, matters but little from the clinical standpoint. In either case the toxicity of the appendical lesion is responsible for the fatal issue which in the vast majority of cases ensues.

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[From the *New York Medical Journal*, August 15, 1903.]

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N. Y.; Everett G. Smith, 86 Maitland St., Toronto, Ont.; Frederick W. Smith, 721 Park Ave., Syracuse, N. Y.; Houghton C. Smith, Wilder, Vt.; Leroy James Smith, Bellevue Hospital, E. 26th St., New York; Louis Spanier, 290 Stanton St., New York; Elizabeth C. Spencer, Woman's Hospital, Philadelphia, Pa.; Edward W. Sprague, Garrett Hospital, Mt. Airy, Md.; Cynthia Steers, 19 Wendell Ave., Schenectady, N. Y.; Olga K. Steinbach, 1443 5th Ave., New York, care C. Bernard; Simon Steinbach, 1443 5th Ave., New York, care C. Bernard; George H. Stephens, 911 E. Genesee St., Syracuse, N. Y.; Adolph Stern, 1829 Croton Ave., Borough Bronx, New York; Alexander M. Stewart, Elmside P. O., Quebec, Canada; Isaac Stiefel, 158 Stanton St., New York; James W. Stiles, Jr., 710 Ocean Ave., Jersey City, N. J.; George Wm. Stimson, Neil House Block, Columbus, Ohio; Wm. C. Stolorow, 238 13th St., South Brooklyn, N. Y.; F. D. Stone, Mexico, Oswego Co., N. Y.; Louis J. Stork, 703½ 3d Ave., Brooklyn, N. Y.; Katherine L. Storm, 1612 Diamond St., Philadelphia, Pa.; Abraham Strachstein, Beth Israel Hospital, Jefferson and Cherry Sts., New York; Gustave Strack, 215 E. 45th St., New York; Isaac Streep, 21 E. 117th St., New York; Edgar de M. Stryker, Raritan, N. J.; Harry R. Tarbox, Cooper Hospital, Camden, N. J.; Archibald W. Taves, 34 W. 85th St., New York; Richard A. Taylor, 215 W. 35th St., New York; Gustavo Testa, 267 N. 6th St., Brooklyn, N. Y.; Benjamin A. Thomas, Willow Grove Park, Montgomery Co., Pa.; Wellington A. Thompson, 265 Douglas St., Manchester, N. H.; Edward M. Tracy, 727 De Bevoise Ave., Astoria, L. I., N. Y.; Theodore Trumpp, 204 Nostrand Ave., Brooklyn, N. Y.; Isidore S. Tunick, 185 Allen St., New York; David C. Twichell, Saranac Lake, N. Y., care Dr. E. L. Trudeau; Jos. S. Van Dyke, Methodist Hospital, Philadelphia, Pa.; Le Roy P. Van Winkle, N. Y. Lying-in-Hospital, 2d Ave. and 18th St., New York; Harvey J. Vary, Skaneateles, N. Y.; H. W. Vickers, Canajoharie, N. Y.; Felix Villamil, 342 E. 30th St., New York; Emanuele Viola, 25 Roosevelt St., New York; Walter E. Vogt, 19 Belvidere St., Brooklyn, N. Y.; Otto Von Huffman, St. Luke's Hospital, New York; Edward W. Weber, 11 S. 5th Ave., Mt. Vernon, N. Y.; Arthur H. Weis, 17 State St., New York, care Mr. Aiton; Le Roy J. C. Wenger, 1040 N. 8th St., Reading, Pa.; Henry R. Weston, Felchville, Windsor Co., Vt.; Filip J. Wettervik, 224 E. 15th St., New York, care Dr. A. Vedin; Joseph N. Wickham, Corona, N. Y.; Karl D. Wood, State Custodial Asylum, Rome, N. Y.; Arthur R. Woods, 90 Main St., Nashua, N. H.; Floyd R. Wright, 202 E. State St., Ithaca, N. Y.; Joseph Witham Young, 127 W. 74th St., New York; Warren H. Young, 154 Claremont Ave., Montclair, N. J.; Eugene J. Zeiner, 706 Leonard St., Brooklyn, N. Y.; Hans Zinsser, 180 W. 59 St., New York; Morris Zucker, 358 E. 8th St., New York.

Homeopathic.

Renel A. Benson, Flower Hospital, 63d St. and Ave. A, New York; Cornelia C. Brant, 91 Macon St., Brooklyn, N. Y.; Edgar B. Cook, 100 Atkinson St., Rochester, N. Y.; Robert C. Fox, 192 Amity St., Flushing, N. Y.; Edwin P. Hall, Homeopathic Hospital, Albany, N. Y.; O. Du Bois Ingalls, Cumberland St. Hospital, Brooklyn, N. Y.; M. W. Johns, Norwich, N. Y.; F. Welles Kellogg, Box 976, Helena, Mont.; Walter E. Nichols, Henderson, Ky.; Mabelle J. Perry, 17 W. 101st St., New York; Daisy I. W. Rosenberg, 481 W. 159th St., New York; John E. Snodgrass, 224 Alexander St., Rochester, N. Y.; Thomas L. Thomson, 194 Main St., Torrington, Conn.; R. Percy Vivian, Barrie, Ontario, Can.; Lucy O. Wight, 438 W. 116th St., New York; George W. Whitney, 140 Fair St., Kingston, N. Y.

Eclectic.

Raffaele D'Angelo, 366 Broome St., New York; Sherman T. Davis, 13 E. 22d St., Chicago, Ill.; Jacob Haas, 1817 Madison Ave., New York; care M. Kraller; Solomon Janovici, 5 1st Ave., New York; Luigi Zito, 181 Mulberry St., New York.

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The Principles of Medical Ethics.

MISUNDERSTANDING and misrepresentation are two evils that are hard to eradicate. The second is apt to follow the first, though sometimes misrepresentation takes a tour on its own hook, and when it does it is not easy to overtake. Of late we have published in these columns considerable material bearing on the questions involved in the title at the head of this article, our object having been to try and throw some light on the somewhat anomalous conditions that exist amongst the medical profession in this state, relating to each other and to the general profession at large, represented in the state and national medical associations.

Nowhere, however, have we seen a better exposition of this subject than in the following editorial and letter, which we take great pleasure in reproducing from the *Medical Record* of August 8, 1903. We ask for it a patient reading by all who have any interest whatever in medical unity:

THE PRINCIPLES OF MEDICAL ETHICS IN THE UNITED STATES.

There has been much misunderstanding concerning the attitude of the Medical Society of the State of New York on the Code of Ethics question, for the original arguments upon which the differences of opinion regarding the desirability of modifying some of the provisions of the old rules have become now a part of ancient history. For this reason we take the opportunity of printing the following letter from our distinguished townsman, Dr. D. B. St. John Roosa, contributed to a recent issue of *The Lancet*, giving an account of the fundamental objects that actuated the movement. We do this the more willingly as it presents the views of the *Medical Record* on the subject, advocated at the time when the discussion was at its height and when party feeling resulted in the formation of radically opposed factions. Happily the recent action of the American Medical Association has reconciled all previous disagreements and has fallen in line with the advanced views regarding the relations of legally qualified practitioners to each

other. Thus recent events have proved that the Medical Society of the State of New York was right in its original position, although much in advance of professional opinion at the time.

The following is the letter of Dr. Roosa:

"While making a short stay in London, in reading *The Lancet* of July 4, my attention was arrested by the views of your New York correspondent on the subject of the agitation concerning the code of ethics of our profession in the United States which has been more or less existent since 1882. Quite an opposite view from that taken by your correspondent is entertained by a large number of the profession, especially in the State of New York, on some points of his discussion. I therefore beg, as one of the active participants in this agitation, that I may be allowed briefly to present that view.

"The Medical Society of the State of New York, a representative and incorporated body of the regular medical profession which has been in existence for nearly 100 years, in the year 1882, having hitherto adopted the code of ethics of the American Medical Association, changed this code, chiefly in the matter of freedom in consultation with all legalised practitioners. The state society was led to this action by the fact that the state, in consequence of the expulsion of homeopathic practitioners from the regular county medical societies of the state some years before, had legalised these practitioners and organised them into a body with powers equal to those of the state society organised early in the last century. Many in the state society at that time advocated the abolition of all *written* codes of medical ethics. In the face of great opposition in other states and some in our own, the New York State Society in 1886 went further and abolished all reference to a code in its by-laws. But that society and all the societies represented in it, the New York Academy of Medicine being one of them, has ever since, in spite of the absence of a written code, maintained the highest standard of professional ethics.

"The object of this important action of the state society was not to secure consultations with homeopathic practitioners, but to establish a *modus vivendi* with them preliminary to securing their coöperation in the passage of a law making the same requirements of all practitioners of the state as to qualifications for practice within the state. The result was accomplished. Having been placed on an equal footing with the regular profession by that profession itself, as they had been already by the state, the Homeopathic State Society united with that of the regulars in securing one of the best laws that exists in any country regulating the licensing of practitioners of medicine. This law came into force in 1891. Now, no men or women can practise medicine in our state, no matter what degree or degrees they may have, unless they have passed a satisfactory and rigorous examination on all points in medical science.

"This examination is conducted by an independent board of

medical examiners appointed by the Board of Regents of the University of the State. Homeopaths, regular practitioners, eclectics, even members of the colleges of physicians and of surgeons in London, graduates of Paris or Berlin, physicians from other states of the union, all must pass this state examination or not be allowed to practise in our borders. The only exception made as to uniformity in the examinations is that homeopathic and eclectic practitioners may be examined with different questions in therapeutics. In other respects the papers are of the same character. This law has been copied in other states of our country, notably by Pennsylvania, Virginia, Illinois, and others. It will be seen by this statement of facts that the Medical Society of the State of New York had a much broader aim than that of 'mitigating the restrictions of the old code' in abolishing all written codes of etiquette, and that its action has been followed by the most beneficent results to the profession, results which were fully in the minds of its members when they took upon themselves the responsibility and breasted the obloquy which their action involved. That action has finally been fully vindicated by the sentiments of the various states of the union as represented in the American Medical Association. This association has hitherto refused representation to the Medical Society of the State of New York, but at the next meeting that representation will undoubtedly be accorded and the strife over the code be ended."

The State Society and Association Not Rivals !

IN the last issue of the JOURNAL, we made the statement that, although there was rivalry between the several state medical societies of the State of New York, there was no rivalry or competition between the state society of 1806 and the state association of 1900, because the members of the association did not constitute a new sect in medicine. This statement will bear examination. Some of our readers may recall conversations or addresses, which seem to indicate the contrary to the above proposition, thus leading to the belief that there is the most active rivalry between these two bodies; in fact, that the very existence of the association, and the organisation of its county branches was, and is, a distinct rival movement, and that the chief end and purpose of the association is to rival, to embarrass, to coerce, to drive out the state society and the county societies, as incompetent, absolutely effete organisations.

The JOURNAL does not desire to maintain that individuals have not now and then been of the above mind, or something like it; or may have had such thoughts and given similar expressions to them. We are not concerned with the vagaries of individuals, but are dealing with a medical movement which finds its expres-

sion in statutory law, with corporations which may be considered and tested by their articles of incorporation, holding that the minds of the incorporators can be studied best in those formal declarations of intentions and purposes, now crystalised and preserved in statute and charter.

After considerable study of the histories and charters of the state society and the state association, we asseverate without fear of successful challenge, that rivalry or competition between these two bodies is impossible, for the following reasons :

1. The theory of the state regarding doctors has been, and is that in the commonwealth there is one medical profession and that was organised into state and county societies by the law of 1806, and its amendments. That subsequently,—namely, in 1857 and in 1865,—it became necessary to organise sects in medicine and it was done, but without violating the original principle that in the state there was one medical profession. That since 1865, there has been no demand for recognition of another and later sect, and no such sect has been recognised or created, and no such sect now exists. Even the sects created in 1857 and 1865 are now practically abolished as such, by the union created under practice act of 1890 and its amendments.

2. The law organising the medical profession and establishing the state society, is the chief corner stone of the public health law of the state, while the state association is unknown and unmentioned in that law.

3. The state society is an inclusive representative medical body, incorporated “for the purpose of regulating the practice of physic and surgery in this state”, by act of 1806, which declared itself to be “a public act” while the state association is a private, exclusive corporation ; membership in the county societies of 1806 is obligatory, whereas membership in the county associations of 1900 is optional.

4. Chapter 452, laws of 1900, incorporating the state association neither repeals, amends, nor mentions any part of the public health law, or the law authorising state and county medical societies. It creates a private corporation having scientific, social and business purposes, but without a vestige of the general executive and administrative powers enjoyed by the state society.

For these and other reasons that are not essential to consider now, the state society and the state association cannot be regarded as corporations of the same class ; the former is public, the latter private ; they have different methods, aims and purposes, different planes and orbits ; moreover, by direction of their respective charters they are bodies distinct and apart and can never be rivals nor competitors.

Lake Keuka Medical Association.

THE midsummer medical society is so unique that we feel sure a little space set apart for the consideration of such an association will not be appropriated amiss. The Lake Keuka meeting which is appointed for August has lately been held at Grove Springs, and we publish the minutes elsewhere. This association was organised in 1900, by some of the younger physicians residing in the counties adjacent to the lovely and picturesque region of the beautiful lake that gives its name to the society.

The meeting recently held under the presidency of Dr. Arthur M. Booth, of Elmira, was a credit in every way to the officers who managed its affairs, and to all who participated in the proceedings. The program contained a group of well selected papers that were presented with sustained interest, from the beginning to the end,—from the president's address to the election of officers. Dr. Booth's address dealt with surgical intervention in the perforative complications of typhoid fever, and was a masterful presentation of the subject. We expect to print it in a future number of the JOURNAL, as well as all of the papers read at the meeting.

The number in attendance was 75, which bespeaks the interest taken in the association. Dr. Augustin H. Goelet came all the way from New York to participate in the proceedings, and he contributed to the interest of the occasion in a marked degree, remaining until the last. Also there were physicians present from Syracuse, Rochester, Buffalo and Elmira, besides the usual quota from the counties bordering on Lake Keuka, so that there was no lack of an attentive audience to the reading of any paper.

The Lake Keuka Club threw open its doors to the members and visitors in a most hospitable manner. A smoker was held at the club on Tuesday evening,—the evening of the first day,—which was attended by the entire association, and proved a most enjoyable occasion. The election of officers resulted as follows: president, A. L. Beahan, Canandaigua; vice-president, P. L. Alden, Hammondsport; secretary and treasurer, W. W. Smith, Avoca. Dr. Smith has held the double office of secretary and treasurer from the beginning, and to his energy and efficiency the association in large measure owes its successful career. The meeting closed as it began, with enthusiasm, and everybody in attendance declared intentions to come next year.

URBANA WINE COMPANY.

After the meeting adjourned all present, including many ladies, boarded the steam yacht "Earl," Captain A. D. B. Grimley, commander, which had been at the disposal of the association during

the meeting, and by invitation and under the escort of Colonel A. J. Switzer, secretary of the Urbana Wine Company, a visit was paid to the famous cellars of that great wine producing industry. Col. Switzer came across the lake to Grove Springs to receive the visitors and conduct them through the vaults. He assigned to each of the several groups into which the party was divided a guide, and each person was supplied with a lighted candle. The experience was interesting and the scene weird. Groping through the narrow avenues of the deep vaults with lighted torches, more than 800,000 bottles of sparkling wine were inspected in all stages of the maturing and settling process; also, more than 300,000 gallons of still wine was seen in containers, holding from 1,000 to 6,000 gallons, the average being about 2,000 gallons a cask.

This company was organised in 1865 and has steadily grown to be one of the largest producers of wine in the world. It markets its output in all quarters of the globe and is noted for the perfection and quality of its wines, both sparkling and still. The officers are: president, W. E. Hildreth; vice-president, M. M. Acker; treasurer, J. S. Reynolds; secretary, A. J. Switzer; general manager, James Neal. Colonel Switzer has been the executive officer of the company for more than twenty years, and is known far and wide for his capacity as a man of affairs, as well as for his genial temperament and affability of manner.

The Urbana Wine Company puts up a sparkling wine in half pint bottles specially adapted for medicinal uses, which fact is an important one for clinicians to remember. The charging or "disgorging" of corks, as it is called, is an interesting process, and owes its success to the clever inventor who has devised appropriate machines for the purpose, whereby there is no loss in substituting the cork of the cellar for the cork of commerce,—all of which should be witnessed to be appreciated. All the guests were greatly interested in what they had seen and expressed in terms their appreciation of the courtesy,—the Urbanity we might say,—of the officers of the company who entertained the visitors so royally.

Leo XIII.—Pius X.

THE death of Pope Leo XIII., which occurred July 20, 1903, terminated the reign of one of the wisest pontiffs that has ever ruled the catholic church at Rome. As a member of the house of Pecci, when elected to the papal throne, he may be said to have represented the nobility when chosen to the high office which he administered so ably for 25 years. During his incum-

bence the catholic church made steady progress toward an improved order of administration. The illness of the great pontiff was as pathetic as it was remarkable. He maintained a cheerful spirit to the last. His malady was unusual for one of his years, and he bore the repeated operative procedures for the removal of accumulation of pleuritic fluid with complacent resignation. Dr. Lapponi, the faithful physician, who conducted the case, acquitted himself throughout the trying ordeal with dignity and skill.

The conclave appears to have chosen wisely in the election of Cardinal Sarto, the patriarch of Venice, who announces himself as Pius X. Though of peasant origin he is a learned man, with a taste for music and art, and bids fair to carry forward the work of the church intrusted to his care, on the lines pursued by his predecessor.

PERSONAL.

DR. ALEXANDER HUGH FERGUSON, of Chicago, delivered the address in surgery at the recent meeting of the Canadian Medical Association, held at London, Ont.

DR. ROSWELL PARK, of Buffalo, was grievously ill of erysipelas for some weeks during the early summer, but has recovered and resumed his professional work

DR. FRANK W. MCGUIRE, of Buffalo, was appointed gynecologist to the Buffalo German Hospital at the last meeting of the staff, vice Dr. H. E. Hayd, appointed surgeon to the hospital.

DR. IRVING M. SNOW and his mother, Mrs. Julia F. Snow, of Buffalo, sailed August 5, 1903, for Liverpool, to enjoy a short European tour.

DR. LILLIAN CRAIG RANDALL, of Riverside Hospital, Buffalo, and Miss Edna Craig Randall, sailed July 8, 1903, on the White Star liner "Teutonic" for Liverpool.

DR. FREDERICK PREISS, was given a dinner at the Genesee Hotel recently by a number of his friends, to commemorate his return from Europe. Those present besides the guest of honor were Drs. R. L. Banta, J. C. Thompson, George H. McMichael, and William Preiss; and Henry Zipp, William Larkins, Dan T. Mur-

ray, Walter C. Kelly, Edwin Leslie, A. E. Richmond, E. W. Mills, and John Murphy.

DR. MATTHEW D. MANN, of Buffalo, delivered the address in gynecology at the annual meeting of the Canadian Medical Association, held at London, Ont., August 25-28, 1903.

DR. JOSEPH M. MATHEWS, of Louisville, according to announcement in the *Louisville Monthly Journal of Medicine and Surgery*, has resigned as professor of surgery and clinical lecturer in the Hospital College of Medicine and Surgery. Dr. Mathews will, it is stated, devote his time principally to literary work, to travel and to his practice.

DR. CHARLES A. L. REED, of Cincinnati, accompanied by his family, sailed for Naples, by the Favre line, August 25, 1903. He will leave his family at Florence, visit Paris and London, and return by the "Teutonic," due to arrive at New York, October 21.

DR. L. S. McMURTRY, of Louisville, paid a visit to Buffalo and Niagara Falls during the latter days of August. He spoke enthusiastically of the progress Buffalo is making, as indicated by the many improvements which have taken place since the Pan-American season.

OBITUARY.

DR. WILLIAM M. MERCER, of Corunna, Ind., a graduate of the University of Buffalo in the class of 1872, died at his home, July 24, 1903, aged 75 years.

DR. JAMES MCGARRY, of Niagara Falls, Ont., died at his home, August 13, 1903, aged 69 years. He was one of the best known physicians in his region, and was a citizen of prominence.

DR. WILLIAM S. PLAYFAIR, of London, died at St. Andrews, Scotland, August 13, 1903, aged 67 years. He was professor of obstetric medicine in King's College for 25 years, was the author of a treatise on obstetrics and was regarded as one of the most distinguished obstetricians of his time. He also wrote several books and monographs on gynecology and other subjects. Dr. Playfair was married in 1864 to Miss Emily Kitson, and they had one son and three daughters.

DR. CLARENCE B. LEVAN, of Buffalo, died at his residence after a prolonged illness, July 26, 1903, aged 39 years. He was a

graduate of Niagara University Medical College, and after about ten years' practice his health began to fail, causing him to abandon his professional work three years ago. He is survived by a widow and two children.

DR. DONALD MACLEAN, of Detroit, died at his home from gastro-enteritis, July 24, 1903. He was born in Seymour Township, Ont., in 1839, and was graduated from Edinburgh University in 1862. He practised medicine in Kingston, Ont., until 1870, excepting the years 1863-64, when he was a surgeon of volunteers in the United States Army. In 1870 he became professor of surgery at the University of Michigan, and held the chair until 1889. He was for a number of years chief surgeon of the Michigan Central and Grand Trunk railroads, and in 1894 was president of the American Medical Association. Dr. Maclean was an honorary Fellow of the American Association of Obstetricians and Gynecology, a surgeon of note and a man of affairs, gifted in speech, with many accomplishments. He was a teacher and a writer as well as an operator of distinction.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists will hold its sixteenth annual meeting in the Northwestern University Medical School Building, Chicago, Ill., Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1903, under the presidency of Dr. Lehman H. Dunning, of Indianapolis.

The Auditorium Hotel, Annex, has been selected for the headquarters of the association, the management of which should be addressed concerning rooms and rates.

Dr. J. B. Murphy, Reliance Building, 100 State Street, is the chairman of the committee of arrangements and will gladly furnish any information to members and guests upon application. Dr. Murphy also can be addressed, relating to accommodations, at the Auditorium Annex, or other hotels.

SCIENTIFIC PROGRAM.

The following list of papers has been offered:

1. President's address, L. H. Dunning, Indianapolis.
2. Supravaginal amputation for fibroids, with report of cases, H. E. Hayd, Buffalo.
3. Traumatic rupture of intestines without external marks of violence, with report of cases, Geo. S. Peck, Youngstown, O.

4. Ectopic pregnancy, H. D. Ingraham, Buffalo.
5. Relationship of the colon to abdominal tumors, J. F. Baldwin, Columbus.
6. Cysts of the kidney, resembling ovarian tumors, with cases, Rufus B. Hall, Cincinnati.
7. Total extirpation of the vagina for carcinoma, Charles G. Cumston, Boston.
8. Surgery of the female bladder and urethra, John B. Murphy, Chicago.
9. Surgery of the ileocecal valve for nonmalignant disease, N. Stone Scott, Cleveland.
10. The curet in postpartum infections of the uterus, D. Tod Gilliam, Columbus.
11. The use of veratrum viride in surgical and obstetrical practice, Chas. L. Bonifield, Cincinnati.
12. Should the uterus and ovaries be removed in cases of double pyosalpinx? C. C. Frederick, Buffalo.
13. Placenta previa, E. T. Abrams, Dollar Bay.
14. The limitations of Cesarean section, E. Gustav Zinke, Cincinnati.
15. Further notes on ovarian grafting, Robt. T. Morris, New York.
16. Conservative surgical treatment of the uterine adnexa, A. P. Clarke, Cambridge.
17. The value of vaginal Cesarean section, M. Stamm, Fremont, O.
18. Hysteria as a result of chronic atrophic parametritis; a contribution to the study of nervous disturbances, W. A. Freund, Berlin.
19. Anesthesia in abdominal surgery, J. J. Gurney Williams, Philadelphia.
20. The technic of gynecological work, A. Vander Veer, Albany.
21. Emergency abdominal surgery at the patient's home—a demonstration, W. G. Macdonald, Albany.
22. Discussion of common causes of death following pelvic and abdominal operations, Joseph Price, Philadelphia.
23. The indications and technic of vaginal drainage for sup-puration in the pelvis, A. Goldspohn, Chicago.
24. Infravaginal elongation of the cervix, M. Rosenwasser, Cleveland.
25. Appendicitis, Walter P. Manton, Detroit.
26. Chloroform in labor, Edwin Ricketts, Cincinnati.
27. Study of the symptoms and surgical treatment of intestinal perforation in typhoid fever, W. D. Haggard, Nashville.
28. Symptomatology of the pelvic musculature, Hugo O. Pantzer, Indianapolis.
29. Palliative treatment of cancer of the cervix, Walter B. Chase, Brooklyn.

30. Abdominal versus vaginal hysterectomy in carcinoma where the radical operation is warranted, John B. Deaver, Philadelphia.

31. Hysterectomy in infectious diseases of the uterine appendages, H. C. Deaver, Philadelphia.

32. The scope and limitation of myomectomy in the treatment of fibroid tumors of the uterus, L. S. McMurtry, Louisville.

33. In memoriam,—William E. B. Davis, L. S. McMurtry, Louisville.

34. Penetrating gunshot and stab wounds of the abdomen, with report of cases, John Young Brown, Jr., Saint Louis.

35. Report of abdominal sections during pregnancy, X. O. Werder, Pittsburg.

36. Shortening the round ligaments by the blunt hook method, H. W. Longyear, Detroit.

37. The Gilliam operation; a clinical contribution, Edward J. Ill, Newark.

38. Report of a fourth consecutive successful operation for acute perforated gastric ulcer, with general infection of the peritoneal cavity, Henry Howitt, Guelph, Ont.

39. Coincident tubal and uterine pregnancy, with report of case; remarks, Frank F. Simpson, Pittsburg.

40. Infantile uterus, scanty menstruation, amenorrhea and dysmenorrhea, cured by stem pessaries, J. H. Carstens, Detroit.

During the meeting Dr. J. B. Murphy, by request, will hold a clinic, at which some demonstrations of special interest will be made. Dr. Macdonald will give a demonstration of Emergency Surgery at the Patient's Home, showing operator, assistants, nurses and equipment in full detail, immediately preceding Dr. Murphy's clinic.

All members of the medical profession are cordially invited to attend the scientific sessions.

THE American Congress on Tuberculosis will hold its next meeting at Washington, April 4, 5 and 6, 1905, under the presidency of Dr. Daniel Lewis, of New York. The president announces Dr. Alfred Meyer, of New York, as chairman of a committee in charge of the section on the sanitarium treatment of tuberculosis.

THE Mississippi Valley Medical Association will hold its twenty-ninth annual meeting at Memphis, Tenn., October 7, 8 and 9, 1903, under the presidency of Dr. Edwin Walker, of Evansville. The secretary, Dr. Henry E. Tuley, Louisville, should be addressed concerning the program and other details.

THE Medical Society of the State of New York will hold an autumn meeting at the New York Academy of Medicine, 17 West 43d street, New York City, Thursday and Friday, October 15 and 16, 1903, under the presidency of Dr. A. T. Bristow, Brooklyn. A cordial invitation is extended to all physicians.

THE American Electrotherapeutic Association will hold its twelfth annual meeting at the Hotel Kaaterskill, Catskill Mountains, September 2, 3 and 4, 1903, under the presidency of Dr. Daniel Roberts Brower, of Chicago.

THE Southern Surgical and Gynecological Association will hold its sixteenth annual meeting at Atlanta, Ga., Tuesday, Wednesday and Thursday, December 15, 16 and 17, 1903, under the presidency of Dr. J. Wesley Bovee, of Washington, D. C. The secretary, Dr. William D. Haggard, Nashville, announces that the indications for the approaching meeting are for an unusually full attendance. The headquarters of the association will be at the new Piedmont Hotel.

THE Medical Association of Central New York will hold its thirty-sixth annual meeting at Auburn, September 22, 1903, under the presidency of Dr. John L. Heffron, of Syracuse. The program is preparing and will be issued early in September.

COLLEGE AND HOSPITAL NOTES.

THE Medical Department of the University of Buffalo will begin its fifty-eighth annual session Monday, September 28, 1903. The advantages possessed by this renowned school of medicine are many and it is excelled by none in the practical training it gives its pupils. The cost of living in Buffalo is moderate, the college fees are reasonable and the location of the building is an admirable one in every sense of the term, while men and women are received on equal terms. These and other reasons should weigh with those who desire to enter upon a medical career. For details address Dr. John Parmenter, secretary of the faculty, 24 High street, Buffalo, N. Y.

THE Buffalo Fresh Air Mission Hospital, located at Athol Springs, on the lake shore, a few miles from Buffalo, possesses

many advantages for the treatment of children. It receives not only babies suffering from cholera infantum and summer diarrheas, but also children with rickets, tuberculosis, bone and glandular diseases. Physicians may avail themselves of the privileges of the hospital for their private patients. The hospital carriage meets every train.

THE Beahan Hospital at Canandaigua has been changed in name to the Canandaigua Physicians' and Surgeons' Hospital.

Two new hospitals will be built at Albany, one a smallpox hospital, the other a pavilion for the reception and care of patients suffering from contagious diseases. The city will loan its credit to sustain the former,—a wise provision that should be adopted in other cities.

BOOK REVIEWS.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London. And F. F. Burghard, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London. Volume VII. The treatment of the surgical affections of the rectum, the liver, pancreas and spleen, the genitourinary organs, the breast and the thorax. Philadelphia and New York: Lea Brothers & Co. 1903. (Price, \$5.75.)

The long awaited last volume of Cheyne and Burghard's surgery has been issued. The size of the volume and the amount of material it contains are sufficient excuse for the delay in appearance. In reviews of previous volumes, the general scope and method of procedure have been very clearly described and there remains but little to say on these points relative to this volume, save that the plan originally laid down for the conduct of the work has been closely adhered to, and operative procedures are outlined with the same clearness and the same simplicity of construction which marked the descriptive work all through the series.

The present volume includes the surgical affections of the rectum and anus in which is given a very comprehensive description of the regional anatomy as a basis of the work described; the surgical affections of the spleen, liver and pancreas; the surgical affections of the breast and thorax, together with affections of the thorax and its contents.

The greater part of the volume is given up to surgical affections of the genitourinary organs and this constitutes the only blemish of the entire work, viewed from an American standpoint. The anatomy of the section is excellently set forth; but the balance of the department is weak, in some places misleading and in

others absolutely useless. This last is best illustrated by a reference to organic stricture, which is discussed at considerable length. In the treatment dilatation is suggested and a metal bougie is advocated; the diagnostic procedure is very carefully illustrated and the pictures show the passing of sounds, which are evidently what are meant by "metal bougies;" there can be no error in this; the fact is patent that a strictly therapeutic instrument is advocated for purely diagnostic purposes; and the use of flexible bougies-a-boule, or acorn-tipped, as they are termed in the book, is frowned upon.

This is a most amazing stand on the part of the authors, who are conceded to be and have shown themselves excellent surgeons. Their frank admission that much of the genitourinary material has been taken from Morris, confirms the suspicion that they are rather weak on genitourinary procedures and while their frankness is commendable they have shown an anxiety too apparent to advocate procedures which are not up-to-date and are not good surgery. They have committed the error of giving much space to matters with which they are not thoroughly familiar and have slighted others which they might have amplified with very little research.

In the pages devoted to the surgery of the prostate much stress is laid on the suprapubic route in prostatectomy and the work of only two American surgeons is mentioned, and then very briefly, Alexander and Parker Syme (spelled Sims in the book); so brief that one might say the reference was merely fleeting. No word of support is given to the perineal route which is conceded to be the best method and the late J. P. Bryson, of Saint Louis, acknowledged to be one of the world's masters of prostatectomy, is not even mentioned,—even by suspicion. Cheyne and Burghard believe in cutting along the floor of the urethra in dividing a stricture, even a deep one; they even go further by stating unequivocally that stricture, spasmodic or organic, is never found in the prostatic urethra,—a fact which has been disproved by demonstration on more than one occasion.

Gonorrhea in the female is dismissed in 21 lines of type, aggregating a little over 200 words, telling absolutely nothing. Male gonorrhea is given more prominence without adding anything to the subject in the way of treatment, except a rather guarded advocacy of what we may consider one of the high crimes in genitourinary work,—the passing of a catheter in acute cases. Irrigation is not advocated. It is regrettable that genitourinary surgery, one of the most important branches, should have been so poorly handled. There can be no possible excuse for it for, certainly, the authors of the work had access to American textbooks, Fuller, White and Martin and to Syme's papers and Bryson's, any of which would have given them material and statistics sufficient to lead them into the rosy paths of correct surgical literature. These authors have made the mistake which many

writers of genitourinary textbooks have made, even on this side of the water, of jumping at conclusions. They can hardly be blamed seriously though, when one considers that of all the textbooks on the subject which have been published in this country there are not three which may be properly considered of valuable use to either the practitioner or the student. There has yet to be written the ideal textbook. Eugene Fuller has come nearer to it than anyone else.

However, in spite of the shortcoming mentioned in the one particular instance of genitourinary surgery, Cheyne and Burghard have written a very excellent work on general surgery, which is well-constructed and of material aid in operative procedures and after-treatment.

N. W. W.

A TREATISE ON ORGANIC NERVOUS DISEASES. By M. ALLEN STARR, M. D., Ph. D., LL. D., Professor of Diseases of the Mind and Nervous System in the College of Physicians and Surgeons, New York. Lea Brothers & Co., New York and Philadelphia. 1903. (Price: Cloth, \$6.00; leather, \$7.00, net.)

The experience of 20 years upon which this work is based is so large and the observations of the author have been so accurate and painstaking that the deductions and conclusions reached by him are of great importance. The author's endeavor has been to give his own observation and experience in the presentation of each subject; hence, the book represents Dr. Starr and the statements found are those for which he is the authority. This makes the value of the book much greater than if the author had chosen that other and easier method, too much in vogue, of compilation and quotation.

The descriptions of diseases and the differential diagnoses are noteworthy features and present a certain definiteness of statement which aids greatly in weighing the value of a symptom or group of symptoms. One of the best examples of this is in the chapter on multiple neuritis, in which the differentiation of neuritis from anterior poliomyelitis, the neurotabes peripherica of Dejerine from locomotor ataxia, and neuritis from diffuse myelitis are models of clearness. In his directions for the use of hydrotherapeutics and electricity, the author has not made use of the general statements too frequently found in medical books. On the contrary, careful directions are given as to the manner of using the different baths. When advising the use of electricity, the size of electrodes, the strength of current and the duration of a treatment are carefully and minutely stated. This is a great improvement on the loose, vague statements that "currents of moderate strength should be used".

It is in the careful weighing of evidence for and against different methods of treatment that the physician will receive the greatest benefit. Especially is this true of his estimate of the various surgical procedures for the relief of nervous diseases and also for the relief of the different deformities resulting from

nervous disease. This work is so preëminently the result of the clinician that it must for many years be a guide in the application of surgical procedures for the alleviation of diseases hitherto incurable.

Of Horseley's advice, that in cases of inaccessible brain tumor a large opening be made in the skull and that a drainage-tube be passed within the dura, or that the ventricle be drained to relieve, if possible, the intracranial pressure, Starr says:

"I have seen this done, but it seems to me of problematical value, as it merely prolongs the misery in a hopeless condition".

Of Lannelongue's operation of craniectomy, for the relief of microcephalic or epileptic children, he says:

"In my own collection of cases, 50 in number, the result cannot be said to be encouraging,—the dangers are many. The prospect of relief is small; cure cannot be promised. Improvement in a very small proportion of the cases only, is the best result which can be promised".

Starr is positive in his endorsement of exsection of the Gasserian ganglion for the relief of the chronic cases of tic douloureux. Of the surgical treatment of sciatica by nerve stretching, he is less hopeful. He has seen one cure and several failures. He believes that no positive promise of relief should be given. He takes a strong position in favor of early operation in spinal cord tumors, stating that a prompt surgical interference cannot be too strongly urged. The chapter on the diagnosis of brain disease is one of the most important.

The entire subject of the principles of cerebral localisation is reviewed and brought up to date. The book is profusely illustrated. The engravings and plate have been selected with great care; many of them are original and many are taken from European authors,—notably from Dejerine, Flatau, and Schmaus.

Too much praise cannot be given the publishers for the beauty of their work. They have succeeded in presenting in most attractive form the best book on organic nervous diseases. J. W. P.

A TEXTBOOK OF LEGAL MEDICINE AND TOXICOLOGY. Edited by FREDERICK PETERSON, M. D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and Walter S. Haines, M. D., Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College. Volume I. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Per volume: cloth, \$5.00 net; sheep or half-morocco, \$6.00 net.)

This book is intermediate between the small manuals and the encyclopedias. The authors have wisely considered the masses and the needs of the profession at large in their choice of weights and measures. They have adhered to the English system, as this is by far the most easily understood by juries.

The contributors to this volume, beside the editors, are Samuel Treat Armstrong, Pearce Bailey, Lewis Balch, James Ewing, Graeme M. Hammond, Smith Ely Jelliffe, all of New York; John

Chalmers DaCosta, Philadelphia; J. T. Eskridge, late of Denver; Josiah N. Hall and Edward Jackson, Denver; Ludwig Hektoen, Chicago; Charles Gilbert Chaddock, Saint Louis; F. W. Langdon, Cincinnati, and Allen J. Smith, Galveston.

The subjects considered are: expert evidence, the technic of medico-legal postmortem examination, identity, signs of death, sudden death, death from cold, heat and starvation, asphyxia, lightning and electricity, wounds, burns and scalds, destruction and attempted destruction of the human body by fire and chemicals, railway injuries, medical jurisprudence of life insurance and of accident insurance, medico-legal aspects of vision and audition, speech disorders, inebriety, the stigmata of degeneration, insanity, idiocy, imbecility and feeble mindedness, and mental perversions of the sexual instinct. Each subject is fully treated and numerous cases are quoted, which illustrate the technical points in expert testimony. Thus Dr. Haines in his article on destruction of the human body by fire and chemicals cites two famous cases: the Professor Webster case and the Leutgert case. The directions to experts are summarised in a few rules, which, if followed, will materially assist a witness in many difficult cases.

The book is profusely illustrated, many of the plates being colored so as to show changes by burns, and asphyxia from hanging. We believe the greatest usefulness of such a book is that it affords a rapid means of reference to authorities for any special case. In our experience the great need an expert experiences during a trial is a book to which he can quickly refer upon any medical point in dispute. No matter how well qualified or experienced a man may be, the occasion every now and then arises when a reliable book which quotes well-known authoritative cases, is a necessity. A good index at such a time adds much to the value of the book. We believe that this book will be a popular one with lawyers and physicians.

J. W. P.

THE PRACTICAL APPLICATION OF THE ROENTGEN RAYS IN THERAPEUTICS AND DIAGNOSIS. By WILLIAM ALLEN PUSEY, A. M., M. D., Professor of Dermatology in the University of Illinois; and Eugene W. Caldwell, B. S., Director of the Edward N. Gibbs *x*-Ray Memorial Laboratory of the University and Bellevue Hospital Medical College, New York. Philadelphia, New York, London: W. B. Saunders & Co. 1903. (Cloth, \$4.50 net; sheep or half-morocco, \$5.50 net.)

Complicated instruments are coming to be more and more employed in medicine, and the importance of a thorough training in physics is emphasised by the now popular use of the *x*-ray outfit.

The authors of this volume have realised the importance of such training and have devoted 215 pages of their work to equipment, giving the essentials of *x*-ray tubes, induction coils, static machines and their management, fluoroscopes, radiography and photography. While this is done in the most scientific way,

nevertheless, one is at a loss to determine details when using the apparatus for a specific disease.

For the second part, consisting of 315 pages by Pusey, we have nothing but praise to accord. The author wisely sets down his personal experience, which cannot be otherwise than extremely valuable, considering the fact that he has come to be regarded as the pioneer expert in this branch of medicine.

The reviewer has listened to his discussions for a number of years and is in full sympathy with his views and purposes. Dr. Pusey is not a mere experimenter; he is a thoroughly scientific and rapidly-growing man. His abundant and fruitful experience has specially fitted him for the preparation of his part of the book, for adept teaching must necessarily be based upon personal observations.

The literature bearing upon the subject has also been carefully looked after. The author has been able to do this part well, although, undoubtedly, it was a hard task on account of so many conflicting statements relating to the effects of the x -ray in connection with therapeutic work. He is satisfied that the x -ray will cure the majority of malignant growths of the cutaneous surface, claiming that this fact is not merely established clinically, but microscopically. It is painless; it leaves fewer scars; the cosmetic effect is much more satisfactory. But after all, it is a question in the reviewer's mind whether we should abandon our old methods in a large per cent of cases. Even the cases quoted by Dr. Pusey could, undoubtedly, have been successfully treated otherwise than as he directs.

The x -ray is "nuts" for the charlatan, who so much depends upon awing his patient and impressing him with a sense of the supernatural. This work of Drs. Pusey and Caldwell will at once become the standard authority in connection with x -ray treatment. It is far and away ahead of anything previously given to the profession and will be appreciated by it as a *ne plus ultra*.

G. W. W.

MEDICAL AND SURGICAL USES OF ELECTRICITY. By A. D. ROCKWELL, A. M., M. D., formerly Professor of Electrotherapeutics in the New York Post-Graduate Medical School and Hospital. Illustrated, new edition. New York: E. B. Treat & Company. 1903. (Price: cloth, \$5.00.)

The author of this treatise and his associate, the late Dr. Beard, were the first to write intelligently or scientifically upon the therapeutic uses of electricity; at least, so far as this country is concerned, they were pioneers. Their books were frequently revised and new editions were issued from time to time, keeping pace with the progress that was making such rapid strides on this topic. Some seven or eight years ago the present author reconstructed the work, having had the old stereotype plates destroyed. The illustrations were newly drawn and much of the treatise was

rewritten. The present edition has been revised still further, carrying forward all knowledge on the subject to the immediate present. Especially have the latest discoveries received appropriate and detailed attention. These include the x -ray, the Finsen light, vibratory therapeutics, and the high frequency currents, which are described and discussed in the last six chapters, and which comprise entirely new material.

The division of the general subject into sections is admirable, and they comprise electrophysics, electrophysiology, electrotherapeutics, and electrosurgery. Every known use of electricity that possesses any value whatever is described under these several heads. The illustrations, as in most works on electricity, are very largely given over to the portrayal of instruments and machines. It would seem important to enlarge the scope of this part of the treatise to the end, that it should become equally as famous for its accurate clinical portraits and engravings as it is for its other valuable material. However, from any viewpoint, it is a book that no person interested in the medical uses of electricity can afford to ignore. Its possession is a necessity to every physician who employs electricity in the treatment of disease.

TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION. Twenty-sixth Annual Meeting held at Boston, Mass., September 18-20, 1902. Frank Hugh Montgomery, M. D., Secretary.

This publication consists of papers read at the meeting of the association, held at Boston, in September, 1902, most of which are illustrated by photographs and appeared in the *Journal of Cutaneous and Genitourinary Diseases*. Discussions on the part of members followed each contribution.

The presidential address was made by Dr. Jackson, of New York, who went over the entire work of the organisation since its first meeting at Niagara Falls, 25 years ago. Included is a list of the officers and members. The facts involved will always be most valuable in the way of both information and reference.

The papers presented were usually confined to modern questions and discussions. Their standard is high and the aggregate constitutes a valuable addition to our current medical literature.

G. W. W.

TRANSACTIONS OF THE AMERICAN ROENTGEN RAY SOCIETY. Third annual meeting held at Chicago, Ill., December 10 and 11, 1902. James B. Bullitt, M. D., Secretary. (Price: cloth, \$1.25; paper, 75 cents.)

This society was organised for the purpose of putting on record the most striking successes of the new light science. The book contains 14 papers, all upon the subjects connected with radiotherapy. The use of the x -ray and its allies is becoming more and more common; so common, indeed, as to preclude the necessity of a national organisation on the part of those employing these

agents. Used as it is in all departments of medical science it would not seem to demand any such distinction. The medical profession has already been nationally organised to suffocation. Let us not seek to add anything to the present alarming aggregate.

G. W. W.

TWENTY-NINTH ANNUAL REPORT OF THE MICHIGAN STATE BOARD OF HEALTH. For the fiscal year ending June 30, 1901. Henry B. Baker, M. D., Secretary.

The reports of the Michigan State Board of Health have always been noted for accuracy and scientific value, this one being no exception to the rule. The section dealing with consumption is, perhaps, the most interesting in the book. It compares its prevalence with previous years from 1893, gives in distribution by counties in a schematic map of the state, and affords much further information, statistical and otherwise, relating to the disease and the methods adopted in dealing with it. The entire report reflects the greatest credit upon the secretary, under whose supervision it is prepared.

BOOKS RECEIVED.

The Latin Grammar of Pharmacy and Medicine. By D. H. Robinson, Ph. D., late Dean of School of Arts, and Professor of Latin Language and Literature, University of Kansas. With an introduction by L. E. Sayre, Ph. M., Professor of Pharmacy in, and Dean of, Department of Pharmacy, University of Kansas. Fourth edition. Thoroughly revised by Hannah Oliver, A. M. Philadelphia: P. Blakiston's Son & Company. 1903. (Price, \$1.50.)

The Principles of Obstetrics. A Practical Manual for the Student and General Practitioner. By Stanley Perkins Warren, M. D., Portland, Me., Obstetric Surgeon to the Maine General Hospital. Octavo; 385 pages. Illustrated by 165 line and half-tone engravings. William Wood & Company, New York. 1903. (Cloth, \$3.00; leather, \$3.75 net.)

A Manual of Obstetrics. By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women, in the Medical Department of the Columbian University, Washington, D. C., and in the Medical Department of the University of Vermont. Ninth edition, revised and enlarged. In one 12mo volume of 628 pages, with 275 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$2.50 net.)

Plain Hints for Busy Mothers. By Marianna Wheeler, Superintendent of the Babies' Hospital, New York, and author of The Baby. E. B. Treat & Co., New York. 1903. (Price, 35 cents.)

Radium and other Radioactive Substances. With a Consideration of the Treatment of Disease by the Ultraviolet Light. By William J. Hammer, Consulting Electrical Engineer. 12mo., pp. 72. Illustrated. New York: D. Van Nostrand Co. 1903. (Price, \$1.00.)

The Practical Medicine Series of Year Books. Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of

Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VII. Pediatrics. Edited by Isaac A. Abt, M. D., Assistant Professor of Medicine, Rush Medical College. Orthopedic Surgery. Edited by John Ridlon, M. D., Professor of Orthopedic Surgery, Northwestern University Medical School. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

LITERARY NOTES.

MESSRS. M. J. BREITENBACH COMPANY, importers of Gude's peptomangan, has sent out a chart containing 60 cuts in colors, showing pathogenic organisms, reproduced in great detail from water colors made by a competent bacteriologist. The *Medical News*, commenting upon this useful chart says:

"No textbook and no one work on pathogenic bacteria contains such a number of excellent diagnostic illustrations, nor such beautiful examples of lithographic art, as these. The full set of 60 cuts has been prepared to send to any physician who writes for them to the firm of M. J. Breitenbach Co., New York".

THE International Journal of Surgery Company, 100 William street, New York, announces in press a book entitled, Nose and throat work for the general practitioner, by G. L. Richards, M. D., laryngologist to the Fall River Union Hospital, Fall River, Mass. Illustrated, bound in cloth, 375 pages; price \$2.00.

THE *Medical Mirror*, founded and edited by the late Dr. I. N. Love, is to be continued under the editorship of Dr. Ralcy Husted Bell. A corps of associated editors embracing some well-known names is announced on the cover.

THE Buffalo State Hospital has issued its thirty-second annual report. The superintendent, Dr. Arthur W. Hurd, presents the affairs of the hospital in a clear and business-like manner, thereby giving further evidence of his capability and special adaptation to the work which he is called upon to perform. The total number of patients under treatment for the period covered by the report was 2,296, and when to this number is added force necessary to attend to the affairs of the institution, it will become apparent that it requires rare talent to properly administer the affairs of the hospital.

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ORIGINAL COMMUNICATIONS.

Fibroid Tumors of the Uterus.¹

By HERMAN E. HAYD, M. D., Buffalo, N. Y.

FIRST, permit me to express my thanks and my appreciation for the honor you conferred upon me, in electing me your presiding officer. Many of the best men in the profession of our city have filled this chair before me, and I assure you I shall always look back with pride and pleasure to this signal mark of your respect.

THE ACADEMY AND ITS WORK.

The year's work, which we have just completed, has been a very creditable one, and the character of the papers and the discussions would compare favorably with those of our national societies, which it has been my privilege often to attend. While we have reason for gratification at the constant accessions to our membership, still we cannot help but feel dissatisfied and disappointed that there are so many capable and otherwise eligible men in our city, who have not allied themselves with our Academy. The Academy of Medicine was formed for the promotion of the science and art of medicine, and to bring together for mutual intercourse and friendship the various members of the profession. How much it has accomplished, and how much it has failed to accomplish,—each and all of us realize. However, we can be reasonably content in the thought that the Academy has grown to be a power in the community, and that it stands for all that is good and best in medicine. Its good opinion and endorsement are asked for by public sentiment, and great questions which affect the well-being of the community must bear the stamp of the Academy's approval. Our early days were a

1. Presidential address delivered before the annual meeting of the Buffalo Academy of Medicine, June 9, 1903.

little stormy, and some of the strong bulwarks of the profession belittled our efforts when a few of us got together to complete the organisation of the Academy ; but time has worked its levelling influences, all now is harmony and accord, and today we stand a united body with a cohesive strength, which makes membership every year more prized and more desirable.

With such an ethical standard and the perpetuation of such noble ideals and high professional motives, it is more than strange that men can be content to live and practise in this community without enjoying the protection and the assistance which affiliation with this distinguished body assures them.

We have taken in eight new members ; eight members were dropped for nonpayment of dues, and two resigned. We have lost by death five esteemed colleagues,—Drs. Mynter, Lothrop, Meyer, Kraus, and Fritz. Dr. Mynter had passed well on the milestone of life, and had achieved for himself and our city a great reputation as a bold, capable and thoroughly scientific surgeon. Three of the others were young men full of promise and expectation. The academy deeply mourns the death of these five estimable gentlemen, and has passed suitable resolutions, expressing its great sorrow at their untimely separation from us. The temptation is strong for me to dwell upon the details of their noble lives, and draw from them lessons to guide and uplift us ; but I must leave that for a more capable pen.

FIBROID TUMORS.

In conforming to the custom which demands from your retiring president an address, I have had some difficulty in the choice of my subject ; but, in view of the growing importance and increasing frequency of fibroid tumors of the uterus, I have chosen from this large and comprehensive field a few practical thoughts, which ten years of experience and operative work, and reading and observation have impressed upon me ; and I trust they will be of interest to you.

Fibroid tumors grow in the uterus, and by reason of the contraction of its muscular fibers are pushed into different areas and localities ; anatomically and clinically they are classified as subperitoneal, intramural and submucous,—according to the relative position they occupy. Sometimes they seem to grow laterally between the folds of the broad ligament, producing the so-called intraligamentary variety. The intramural and submucous ones have pain and hemorrhage as their most constant and dangerous symptoms, while the subperitoneal produces pressure upon contiguous organs, and thus interferes with the safety and well-being of their host. These tumors differ in the rapidity of their

growth, and in the group of symptoms they produce, are usually recognised as benign products, and are only to be interfered with by surgical means when they interfere with the life and function of their possessors. Sometimes they attain to an enormous size, and yet their presence produces very little suffering; while again, though they be very small they may rapidly undermine the patient's health by repeated and exhaustive hemorrhages, associated with constant pain and suffering.

Three years ago, Dr. Edward J. Ill, of Newark, N. J., read a classic paper before this society, upon the indications for, and the election of, operation for uterine myomata, in which he divided the subject into three very practical divisions:

1. Those in whom life is, or might be, endangered, directly or indirectly, by the growth.
2. Those in whom health is so impaired that life becomes a burden, yet is not endangered.
3. Those in whom mental conditions suffer, from the fact that they are aware of having the tumor.

Different men will interpret these conditions in different ways, according to their instinctive desire to be radical or conservative. Many men in the profession look upon every fibroid as a very dangerous growth, and will, therefore, magnify the importance and dangers of every symptom. For instance, mere loss of blood in a woman 45 years old, if she is strong physically and can be carefully nursed, need not cause the same anxiety that it would if she were 35, because the probabilities are that the menopause will produce shrinkage in the tumor, no matter what the ultra-operative men may say to the contrary. Again, what would be a dangerous loss of blood in one person might not be so significant in another. Some women habitually lose great quantities of blood at their periods, but so quickly make it up that it seems to have very little effect upon their ordinary health and spirits. However, hemorrhage is to be considered as one of the chief dangers of fibroid tumors, particularly if the growth is of the submucous variety, and is, therefore, one of the chief indications for operative intervention.

Fibroid tumors undergo various forms of degeneration, and sometimes very suddenly take on changes which make operation imperative. Intrauterine manipulations, curetage, and electrical cauterisations, often produce septic foci in the tumor as well as necrosis and sphacelation, making a most urgent indication for operation. Pressure-producing tumors situated low down in the pelvis, which occasion great pain and inconvenience to the bowel and bladder functions, need operative interference, and particularly if bladder, ureteral and kidney complications are setting in.

In some persons these pressure symptoms are more serious and occasion more anxiety than they do in others. Marked headache, sacral neuralgia, and sciatica are often so distressing that these patients readily acquire the morphine and liquor habit for relief. Again, pedunculated growths sometimes undergo torsion by twisting of their pedicles, or produce such distress by their blows and jars upon surrounding viscera, that early interference becomes necessary.

Tubal and ovarian complications, which are so frequently associated with fibroid disease of the uterus,—such as hydro-, hemato-, and pyosalpinx, with cystic degeneration of the ovary, hematomas or abscesses of the ovary,—demand operative measures, as life is endangered by the pain and distress of these complications, and at the same time they frequently cause a local if not a general peritonitis. Tumors that undergo malignant degeneration or tumors that continue to grow after the menopause, should be quickly removed, as a mere increase in size would be strongly suggestive of malignancy. Old calcareous tumors which have been apparently innocent for years, providing they suddenly develop pain and tenderness, must be seriously considered, and upon the slightest increase of temperature must be removed, as they, too, often quickly develop pus, and are thus a great menace to life.

The presence of a myomatous growth in a pregnant uterus does not necessarily demand operative interference, as many of these women go on to term and through delivery without any trouble, because the tumor is lifted up by the growth and development of the uterus, and offers no impediment whatsoever to the incoming head and its expulsion. However, when the tumor is situated low down in the pelvic outlet, and when it remains low and will of necessity offer an obstruction to delivery, it must be removed early, and, if possible, through the vagina; but, if no active symptoms exist and none are immediately anticipated, the case, perhaps, may be left until later, when the child is viable and could be removed by Cesarean section. However, the exigencies of each case must be carefully weighed and when it seems imperative to interfere, the safety of the mother must be considered first, and her undeveloped progeny sacrificed in her interests if necessary. But every uterus with a fibroid tumor when it becomes pregnant, need not be sacrificed, even if operative interference becomes imminent, because conservative operations can often be done without causing premature labor or abortion. Emmet, in the *American Gynecological and Surgical Journal*, June, 1901, reports nine cases where abdominal myomectomy was performed in the pregnant uterus without inflicting any injury, and without causing premature expulsion of the ovum.

Supravaginal hysterectomy has such a small mortality,—not more than 5 or 6 per cent.,—that we can in good faith to ourselves and our patient's welfare, recommend it when once we are satisfied that the tumor is progressing in size and its symptoms are demanding operative treatment. There is, perhaps, more danger in being ultraconservative than in being ultraradical, and I would sooner err on the side of early operation than no operation, until the economy is so weakened by repeated floodings that self-resistance is reduced to a minimum, and death takes place from some simple intercurrent disease; or when pressure symptoms are permitted to go on until bladder, ureteral and kidney disease become serious complications. Nor are we justified in assuming that the menopause will always bring an abatement in the symptoms; but, on the contrary, a fibroid tumor, no matter if it be innocent and quiescent, must be looked upon as being always surrounded by possible harm and inherent dangers. No doubt, some continue to grow, even after the cessation of the periods, but such growths should always be looked upon with suspicion, because these tumors in old age are prone to various forms of degeneration, and occasionally to malignancy.

Two interesting cases are reported by Noble,—one being that of a woman 70 years old, who had a calcareous fibroid tumor for years, which suddenly became necrotic from a drive over a rough country road. An abscess resulted, and broke into the bowels. A subsequent operation was performed, which resulted fatally. Another, aged 67, had a calcareous tumor, which pressed upon the right ureter and caused an abscess of the right kidney. Operation was performed, and death occurred on the fourth day.

A person with an ordinary inguinal hernia, who is wearing a well-fitting truss, is comparatively safe. Yet such an individual should not get away from civilisation into the wilds of Africa, because a dangerous strangulation may set in at any time. The comparison is equally applicable to the possessors of fibroid tumors, and makes such a careful and conscientious operator as Noble, of Philadelphia, very radical in his views concerning their treatment, as so many dangers can set in infinitely greater and much more insidious than hemorrhage, which require the most skilled surgeon and without delay,—such as necrosis and sphacelation, myxomatous and cystic degeneration, with purulent and septic foci, coming on suddenly in otherwise dormant growths. Inversion of the uterus due to a fibroid is a rare condition, but would necessitate operation.

So far as any other measures are concerned for the cure of fibroids, they are simply to be condemned. Electricity once promised so much, but the dangers associated with its employ-

ment, even in careful hands, are as great as operation would be under the same favorable circumstances. So with ligation of the uterine arteries. The benefit is so transitory and so uncertain, that this procedure should never be undertaken,—at all events, only under the rarest circumstances.

The operation for the removal of the ovaries to stop the further development of the fibroid, is too uncertain. Years ago, when the dangers of hysterectomy were so great, such make-shifts were permissible; but hardly now, although there is no doubt that complete removal of the ovaries and tubes has caused diminution in the size of the tumor and a cure of the painful and dangerous symptoms, especially the hemorrhage. Therefore, in certain cases when the element of time is great, when the dangers of chloroform become manifest, and the life of the patient is in great risk, we can be content to quickly remove, thoroughly and completely, both tubes and ovaries with some expectation,—although perhaps slight,—of relief, and possible cure.

In the surgery of fibroid tumors, America may justly feel proud, since it was our surgeons who were the pioneers in this work, and who performed the first successful hysterectomy. It was Dr. Ephraim McDowell, of Kentucky, who made hysterectomy possible when he performed his first successful ovariectomy, in 1809. There was then created a necessity for the differential diagnosis of ovarian cysts and solid tumors of the uterus, because for a great many years ovariectomy was the only justifiable surgical undertaking,—in fact, the abdomen was frequently opened under a mistaken diagnosis, and finding a tumor of the uterus, the operation was abandoned and the wound closed. The history of the present operation, with its low mortality and almost perfect technic, would be incomplete without first paying tribute to the early operators in this great branch of surgery, who, under the most disadvantageous circumstances, gave us practically the operation we are advocating today.

To Clay, of Manchester, Eng., John Bellinger, of Boston, and to Burnham and Kimball, of Lowell, Mass., we must respectfully give thanks. Gilman Kimball did the first successful hysterectomy September 1, 1853, and made a correct diagnosis before the operation was undertaken. Burnham had operated successfully in June, 1853, but under a false diagnosis, having opened the abdomen for an ovarian tumor, and, finding a fibroid uterus, removed it successfully. The operations they did were essentially the supravaginal amputation most popular with us at the present time, excepting that they left the lower end of the abdominal wound open to permit the escape of the long threads which were left attached to the stump of the tumor.

With the accession of anesthesia, together with the triumphs of modern surgery, the aseptic treatment of wounds, and the employment of safe and absorbable ligature materials, refinements of technic have resulted; so that the crude operation of Kimball is now developed into one of scientific precision and exactitude. We cut off the broad ligament in sections, tie the four main vessels separately, deperitonise the uterus anteriorly and posteriorly, and use these portions of peritoneum as flaps to cover over the raw cervix, after the uterus and its tumor have been amputated. This is accomplished by a running catgut suture by which the peritoneal cavity is shut off, and an extraperitoneal disposition of the stump is effected. The abdominal wound is then permanently closed without drainage.

The first successful abdominal myomectomy was done by Washington Atlee, March 3, 1853. Thus it will be seen that American surgeons enjoy the high distinction of having performed the first successful ovariectomy, the first abdominal hysterectomy, and the first abdominal myomectomy. If we go a step further, and add to that brilliant galaxy,—McDowell, Burnham, Kimball and Atlee,—the name of Marion Sims, and later that of Emmet, our countrymen not only did the first successful operations upon the uterus for abdominal tumors, but laid the foundation of modern gynecology.

Apart from the dangers of sepsis and those accidents which are always possible when operating in the vicinity of the viscera, hemorrhage was the chief anxiety on the part of the surgeon when the stump was dropped back into the peritoneal cavity. Various devices were used to avert this danger. Elastic ligatures were applied tight about the neck of the raw cervix and left in situ; finally, the stump was pulled forwards, and in various ways was fastened to the lower end of the abdominal wound by different kinds of mechanical appliances, and thus the stump was treated extraperitoneally, so that any subsequent complication incident to it could be effectually controlled. Koeberle, by means of the serrenoeud, and his low mortality soon made the operation of hysterectomy popular and this was supplemented by the splendid results of many of his followers, chief among whom is Dr. Joseph Price, of Philadelphia, today the greatest exponent of this method of removing the uterus for fibroid tumor, and, strange as it may seem, about the only great surgeon who still clings to this practice of disposing of the stump.

It is surprising to see how slow we have been to take advantage of the knowledge which anatomy gave us so many years ago. Men had dissected the broad ligament and mapped out with exactitude the blood supply of the uterus time and again, yet it

was not until 1889 that any practical application was made of this knowledge. Dr. Stimson, of New York, revolutionised the whole field of uterine surgery when he demonstrated that by tying off the uterine and two ovarian arteries complete hemostasis of the uterus could be accomplished, whereby all danger of hemorrhage from the stump is effectually overcome, and any little oozing which occasionally takes place can be further controlled by sewing over the exposed area with a catgut suture. Now we sit back and wonder why such a trivial matter was not earlier appreciated; but in doing so we must also realise that the greatest triumphs, not alone in modern surgery, but in science, inventions and mechanics, were stumbled upon, and by the simplest application of nature's laws and principles we commenced to build up a whole new universe.

Stimson's idea was quickly taken advantage of by Baer, of Philadelphia, who reported, in 1892, nine successful supravaginal amputations for fibroid tumor without a death. He paid no attention to the os. It was neither sewed up nor treated with cautery, nor any species of disinfectant or caustic. The wisdom of this procedure has been borne out by the results of the bacteriological laboratory, which have shown us that the body of the uterus contains no infecting organisms, unless they have been introduced previously by violence and other forms of traumatism; and clinically we are all able to report uninterrupted convalescence and recoveries after all kinds of complicated supravaginal operations without paying any attention to possible infection from without through the open os. In fact, most of us believe that all means directed to disinfecting the canal are quite unnecessary, and are apt to invite infection and subsequent formation of pus.

The only other operation which is employed to remove fibroid growths is complete hysterectomy, or panhysterectomy, abdominal and vaginal. The operation of total hysterectomy meets some special indications, but it is more difficult to perform, has a higher mortality, takes more time, and has increased dangers from hemorrhage; and it robs the vault of the vagina of the support which the cervix gives it. However, in certain cases it has some advantages: for example, when the cervix is the seat of marked cystic degeneration, or has a bad tear, and particularly if associated with considerable vaginal prolapse, or when drainage must be provided for. Cancer has already developed in a cervix after a supravaginal amputation, but so seldom has it occurred that we are not justified in assuming the extra risks incident to the total operation unless the cervix is lacerated or suspicious in other ways of possible malignancy. Statistics must be worth something, and, although we question them and juggle with them

in various ways, they still represent the honest work of good men, and by them we must estimate the gravity and dangers of operations. The mortality after supravaginal amputation is only 5.6 per cent., while that of total extirpation in the hands of just as good men is 9.6 per cent.

Operations for fibroid through the vagina, it seems to me, must presuppose that the growth be small and the vaginal outlet large and roomy. The great objection, however, for operations per vaginam is the impossibility of conservative work, because the uterus must be destroyed; but when the abdomen is opened, one can decide as to the propriety of doing simply a myomectomy, and thus save the function and utility of the organ. Anyway, the field for operation through the vagina upon the uterus for fibroids of any size is limited, and the dangers of such operations are as great as properly directed ones per abdominem. However, occasionally submucous fibroids and polyps extruding through or presenting at the os, can often be very easily and perfectly removed through the vagina, without any great danger and with little difficulty, and such cases should always be attacked from below.

The field for abdominal myomectomy is limited, nevertheless, it is an important one; and it becomes larger the more qualified we are to master the refinements and difficulties which beset this class of operations. A young and inexperienced operator could not trust himself with the risks this work entails, but with increasing experience comes increased confidence and wisdom, and it is surprising to see how easily large tumors can be shelled out of their enclosing envelop with perfect safety, and with the possibility of leaving a healthy functioning organ. Perhaps often, in our zeal to conserve the uterus, we are taking too many risks, not only to life, but to the future well-being of the woman. To remove a great many fibroids and leave behind a mutilated uterus assumes risks which only the keenest judgment can pass upon; and even then smaller tumors may exist in the muscular wall unnoticed and go on developing to such proportions as to necessitate a total operation in the near future. Moreover, the mortality of such complicated myomectomies is high, and few women would be willing to jeopardise life simply to possess an organ which, in the end, may serve but little purpose. Of course, where a woman has a good uterus and no children, and the desire for offspring is great, and perhaps with it the possibilities of inheriting an estate, we are justified in making a greater effort, than when the social and moral conditions of the woman look more for a perfect cure than for mere relief with possible maternity.

I have been compelled to operate three times for a painful

TABLE OF CASES.

NO.	DATE.	AGE AND NAME.	CHARACTER OF TUMOR.	SYMPTOMS.	OPERATION.	REMARKS.	RESULT.
1	February 7, 1900.	33 Mrs. K.	Very large hard intramural fibroid; few adhesions. Very short pedicle.	Great pain in back and down legs.	Supravaginal hysterectomy.		Cure.
2	January 10, 1900.	42 Mrs. G.	Large fibrocystic soft tumor, size of baby's head, extending into broad ligament, and mistaken for intraligamentary cyst. Complicated with large ovarian cyst, size of football. Dense adhesions.	Pain and inability to get about and hemorrhage.	Supravaginal hysterectomy after first tying off ovarian cyst.		Cure.
3	March 21, 1900.	46 Mrs. C.	Large mycystoma of right and posterior side of uterus; felt like intraligamentary cyst.	Great pain in right side and hemorrhage and difficulty in locomotion.	Supravaginal hysterectomy.		Cure.
4	November 21, 1900.	46 Mrs. W.	Large pedunculated fibroid from posterior and lower part of uterus, and filling up whole pelvis.	Pain and inability to get about. For years a terrible sufferer. Bowel and bladder distress.	First removed fibroid by myomectomy, but bleeding was so active uterus was then amputated, supravaginally, and in it were found smaller fibroids.		Cure.
5	November 30, 1900.	29 Mrs. T.	Hard fibroid extending into right broad ligament, larger than one's fist; and smaller nodules, size of potato, on fundus. General adhesions. Operation very difficult.	Great pain in back and sciatica. Was rapidly becoming a morphine habitué.	Supravaginal amputation.	August 28, 1898, I removed a left ovarian cystoma from this patient. At that time a small fibroid, no larger than an olive, could be felt on right side of uterus between folds of broad ligament. Another, not the size of a pea, was seen on top of uterus. These subsequently grew to the size seen at operation.	Cure.
6	January 12, 1901.	36 Mrs. M.	Hard intramural fibroid, size of two fists, and adherent cystic ovaries. Tubes closed.	Great pain and tenderness, and constant distress in lower part of abdomen.	Supravaginal amputation.		Cure.
7	March 1, 1901.	40 Mrs. B.	Large intramural fibroid growing into uterine cavity without pedicle, and delivered with great difficulty.	Hemorrhage and pain: for years a great sufferer. Very marked anemia.	Supravaginal amputation.	In this case the abdominal wall was sutured in layers with chromicised catgut. On the 11th day patient wanted the	Cure and no rupture to this day.

hematoma in an ovary which I had previously resected, and left in to lessen the unpleasant sequelæ which follow total oöphorectomy; and I am satisfied that, unless the indications be very strong, and the probability of future childbearing great, most of these ovaries, which are no doubt considerably diseased, should be removed and not tinkered with by so-called conservative surgery.

The foregoing table gives dates and a list of my supravaginal operations for fibroid tumors. This includes in all thirteen cases, with one death. This patient was operated upon on April 9, 1903. It was an extremely difficult operation,—a large multinodular fibroid, with its largest dimension placed antero-posteriorly in the pelvis, wedged into the hollow of the sacrum, and with great difficulty extricated. It pushed the bladder so far up and forward that the nurse did not succeed in passing a catheter into the bladder so as to thoroughly empty it before operation, according to inflexible rule. In separating the bladder, I tore a small hole into that viscus low down and posteriorly, which I quickly and carefully sewed up. I felt reasonably certain that it would hold, but evidently it did not, because the patient died on the third day, and the undertaker told me that when he used the trocar for embalming purposes a urinous-smelling fluid came out of the peritoneal cavity. A postmortem was denied us. Had I done a complete hysterectomy and left the vagina open and provided a gauze drain, I feel satisfied that my patient would have made a good recovery. About four hours after the operation, I withdrew with a hard catheter over a pint of urine that contained pus,—evidently residual urine in a sacculated bladder, which the woman had failed to pass with her efforts at urination, and which the nurse had failed to reach with a soft catheter. This distension of the bladder no doubt contributed to the little tear I made in separating it from the uterus.

I have also done a number of myomectomies, vaginal and abdominal, and a number of total hysterectomies, vaginal and abdominal, for various forms of fibroid disease, but I prefer the supravaginal amputation as given to us by Baer, when the abdomen must be opened and the uterus sacrificed, and occasionally I have modified it by taking advantage of the suggestions of Kelly, Goffe, and many other recent operators, when some special indication seemed to exist for their employment.

493 DELAWARE AVENUE.

TUBERCULAR PERITONITIS.—The best results follow a median incision below the umbilicus, free evacuation of fluid and immediate closure of the abdomen.—*Denver Med. Times.*

An Easy Method of Percentage Infant Feeding.¹

By C. W. M. BROWN, M. D., Elmira, N. Y.

IF IT be true as has been claimed that 50 per cent. of American infants are fed by artificial methods, then there is urgent need that every general practitioner as well as pediatricists should be familiar with infant dietetics and the adaptation of suitable mixtures to the individual case. The history of the general consensus as to the best methods of artificial feeding of infants, reflects more rapid changes during the last few years than any other branch of medical practice. These changes have been brought about by a better understanding of the composition of human milk and a better knowledge of the bacteriology of milk and of the intestinal canal, as well as by a more thorough appreciation of the principles of feeding and nutrition. Biedert, thirty years ago, first gave an impetus to scientific milk examination and modification based upon chemical examination and made recommendation of mixtures of cream and milk, sweetened and made alkaline with lime water.

Ten years later, in 1882, the younger Meigs called attention to the low percentage of the proteids in human milk as well as the necessity for reducing the proteids in mixtures for artificial from cow's milk, and first worked out a formula that he believed corresponded with the analysis of human milk.

In 1886, Soxhlet proposed sterilisation of cows' milk by heating as the best safeguard against the intestinal diarrheas of bottle-fed infants. This had been practised for many years previously by Jacobi in our own country. For a time sterilisation became general all over the civilised world. Later, in 1890, Rotch made original contributions to percentage milk modification including the use of laboratory methods and prescription feeding. From this point all the recent advances have proceeded. The very fact that the laboratory methods were not available for general use made it necessary that others should devise ways and means by which we might approximate the advances suggested by Rotch. That so many methods and statements have been put forward concerning milk modifications suggested the lack of practicability inherent in most of them.

Methods of calculation or modifications have been proposed by Holt, Baner, Coit, Wescott, Taylor and Bartley and others, whereby various combinations more or less accurate of the percentage of fat, proteids, and sugar, could be determined in a mixture. These systems of modification were supposed to be

1. Read before the Elmira Academy of Medicine, June, 1903.

made available for the so-called home modification of milk in the absence of the milk laboratory; also for the guidance of those requiring accurate milk adjustment for the private case or for the large number of delicate infants in hospitals and other institutions. That the physician should be able to think in percentages to construct his own formulæ, reduce them to simple terms and transfer the modification of the mixtures to the caretaker, is absolutely necessary if he would do good work among the larger number of his feeding cases. The necessity, therefore, upon us for more general and careful study of infant feeding is becoming more and more urgent. We are altogether too prone to get ready-made foods and to fall back upon that strong hold of ignorance, that there are many children who "cannot take milk." The secret of successful feeding is to give a food which a child can digest. Age and weight are no guide in many cases. The key to success lies in putting the strength of the mixture down to so weak a point that a child can digest it, and then work it up to the point of tolerance.

The digestive organs of a young infant are exceedingly sensitive, easily deranged, and the simple functional derangement speedily becomes a gastric or intestinal catarrh. Hence the importance of paying attention to the food for the first month or two and of promptly and intelligently making necessary changes in the food to relieve the minor symptoms of indigestion. Feeble digestion or chronic indigestion are seldom due to inherited conditions, but in most cases are the result of previous bad feeding or bad nursing. The carefully obtained history is of great value in enabling one to judge of the condition and capabilities of the digestive organs of an individual child. A careful regulation of the milk percentages in intelligent hands will, in private practice, be successful in a great majority of cases. Success by this method may be extended in proportion to the accuracy of the diagnosis of the case, of the symptoms, and to the degree of error in the previous prescriptions employed. Cases that cannot be helped in this way are chiefly very young infants, and those in which the disorder is of long standing.

One of the secrets of the success obtained by many specialists in feeding children of weak digestion, lies in the fact that they boldly put the mixture down to very small percentages in spite of the fears of the mother that the child will not get sufficient food. That is the secret of the digestion of condensed milk. In a 1 to 12 dilution we have a food that contains but 1-8 of the amount of fat and 1-3 of the amount of proteid found in the normal breast milk. The fact that children do not do worse on these exceedingly weak milk mixtures is but one of many proofs that they

commonly receive more than they require. If the doctor who is wedded to the use of condensed milk would not make his fresh milk mixtures four or five times as strong as his condensed milk mixtures, he would be much better satisfied with fresh milk.

The central thought in the newer modification which Holt aptly calls the "American method," is to consider the different elements of the food separately and to adapt their proportions to the child's digestion. It is based upon the percentage composition of woman's milk, and also recognises that there is a difference in the digestibility of cow's milk and woman's milk, particularly in the proteids. It aims to discover the proper proportions of fat, sugar and proteids and the best methods of increase in healthy infants. When difficulty exists in the digestion of milk it is usually with one of its constituents rather than with the milk as a whole, or at least, chiefly with one. In such a condition instead of stopping milk entirely, or reducing the proportions of all the constituents by further dilution, the proportions of that one which is causing the disturbance should be changed; in other words, percentage modification aims at something which is "definite, exact and at the same time flexible." It is perhaps a futile dream to hope that some day as a result of artificial selection and feeding, it will be possible to produce a cow that will yield milk that closely resembles in composition woman's milk. But as this has not yet been done, it is necessary to modify it, to use the technical phrase, in order to make it resemble woman's milk.

How, then, can modification be effected? It can be done in a milk laboratory or at home. The first involves considerable expense and may be impossible in the absence of a laboratory. The second or home modification although so simple in principle is, owing to the complexity with which it is already laid down in textbooks and in journal articles, often dreaded by the physician. Physicians revolt at doing an algebraic problem and considering an arithmetical sum at the bedside, and they also object to explain what they have been led to believe is a difficult and complicated process. On this account they either depend on the milk laboratory or solve the problem of infant feeding by telling the mother to get such and such a patent food and follow the directions. Many of these babies fed on patent foods go from bad to worse, although many thrive as they are in reality fed on crudely modified cow's milk with the addition of a food more or less useful, as the case may be.

The knowledge of home modification of milk would obviate this. This knowledge is necessary even when the conveniences of the laboratory can be obtained and where expense is not an object. For it is, I am sure, a fact that even with intelligent changing of

the formulæ, laboratory modifications do not always agree. Infants are not machines and they are not all alike, and they will not always do what you expect of them. Laboratory milk is first divided into two parts by a centrifugal process,—one containing practically all the fat and the other part nearly free from it. These two portions are then recombined with water, sugar of milk, and lime water in proportions to meet the formulæ required. In milk modifying at home the cream is obtained by natural separation, by standing.

In the *Boston Medical and Surgical Journal*, of March 25, 1899, Dr. Charles W. Townsend describes a method of milk modification which I have used for some years with satisfaction, and which seems to me to be the simplest of all, therefore I shall quote freely from his writings. He and others found by numerous tests that the upper fourth of milk of average quality after standing four or five hours contained approximately 10 per cent fat, 4 per cent. proteids, and 4 per cent. sugar. The percentage of albuminoids in this top milk is practically the same as in whole milk, that is 4 per cent. It will be seen that the relation between the fat and albuminoids is the same as in human milk, the fat being $2\frac{1}{2}$ times as great, that is, 10 to 4, or 4 to 1.60 per cent. Top milk can be obtained by siphoning off the lower $\frac{3}{4}$, or more simply by pouring off the upper quarter. And it has been found that the cream obtained by these two methods is practically the same, varying according to Dr. Townsend's experiments only .17 of 1 per cent. The result being the same, the decanting process is preferable, it is much simpler and there is less difficulty in doing or having it done accurately and there is no siphon to be procured and kept clean. With a 10 per cent. cream it is evident that one ounce of cream in a 20 ounce mixture would give a percentage of 1-20 of 10 per cent. or one half of 1 per cent. of fat. In the same way the percentage of albuminoids would be 1-20 of 4 per cent. or .2 of 1 per cent. The percentage of sugar would be .2 of 1 per cent.

One more fact is needed before formulating a rule for human modification and that is that an even tablespoonful of sugar of milk weighs $3\frac{1}{2}$ drams and each tablespoonful added to a 20 ounce mixture raises the percentage of sugar 2 per cent. It may be added that each tablespoonful of cane sugar which may sometimes be used, raises it 3 per cent. The rule to be remembered is this: each ounce of 10 per cent. cream in a 20 ounce mixture represents .50 of 1 per cent. of fat, .20 of albuminoids and .20 of sugar; and each even tablespoonful of sugar of milk represents 2 per cent., or of cane sugar 3 per cent. Thus, if we order top milk, 4 oz.; water, 15 oz.; lime water, 1 oz.; sugar of milk 2 table-

spoonfuls, we are making a formula of fat 2 per cent., sugar, 4.8 per cent. and albumin .8 per cent. If we order 8 oz. of top milk, 11 oz. of water, 1 of lime water and $2\frac{1}{2}$ tablespoonfuls of milk we are making a formula of fat 4, sugar 6.60 and so on. Of course, this extremely simple method gives, as I have said, a fixed relation between the fat and albumin, the fat being $2\frac{1}{2}$ times as much as the albumin, the normal relation in human milk. If we wish to increase the albumin without the increase of fat it is necessary to add milk from which the cream has been removed, or whole milk, or top milk, containing less than 10 per cent. of fat.

By ordering whole milk which contains 4 per cent. of fat, 4 per cent. of proteids and 4 per cent. of sugar; the upper quarter which contains 10 per cent. of fat, 4 per cent. of proteids and 4 per cent. of sugar; the upper half of which contains 7 to 8 per cent. of fat, which for the purpose of calculation, may be called 8 per cent., 4 per cent. of proteids and 4 per cent. of sugar, or gravity cream which contains approximately 16 per cent. of fat, 4 per cent. of proteids, and 4 per cent. of sugar, and pursuing the same methods of division we can obtain almost any proportions of fat or proteids. The sugar can be raised to any desired amount by remembering the rule already given—namely, each level tablespoonful of sugar of milk added to a 20 oz. mixture raises the amount of sugar by 2 per cent., the amount of sugar in a mixture being the same as the amount of albuminoids. In digestive disturbances where the fat, sugar and albuminoids all have to be reduced to minute quantities the nutritive value of the mixture can be greatly increased without materially taxing the digestion by the addition of the raw white of egg. The white of an egg in a 20 oz. mixture adds half of 1 per cent. of albumin. One ounce of top milk, 18 oz. of water, 1 oz. of lime water and $1\frac{1}{2}$ tablespoonfuls of sugar of milk give the formulæ: fat, .50 of 1 per cent.; sugar, 3.20 per cent.; albuminoids, .20 per cent., can be made much more nourishing by the addition of the whites of one or two eggs, and will be retained where the increase of the milk would not be. The proteids give most trouble in infantile digestion, therefore, their modification is most important.

Woman's milk contains twice as much lactalbumin, which is noncoagulable (0.9 to 0.5 per cent., Bartley) as casein, while cow's milk contains 2 or 3 times as much casein as lactalbumin (3. to 0.75, Bartley). Because of this, cow's milk coagulates as a fine dense mass in the infant's stomach, which is only lessened, but does not disappear, when the proteids are reduced to the same amount as in woman's milk. This necessitates making the proteids at beginning, feeding as low as 0.30 to 0.50 per cent. If this is done and the fat made as low as 1. to 1.50 per cent., the food

strength may be gradually increased with slight risk that the milk will fail to agree, but if milk, especially the proteids, has been given too strong and continued until the child has a gastric or intestinal catarrh or both, then much time will be lost before food of proper strength and amount can be safely given.

Many other mixtures can be used in difficult cases, such as the use of whole or part whey mixtures, in which the casein has been coagulated with pepsin and strained out, with the addition of white of eggs and the use of cereal decoctions made from oat-meal, barley or rice. It is probably true that most children will do better after the seventh or eighth month with the use of a cereal decoction as a diluent for the milk, and in some cases they are undoubtedly of advantage in much younger infants.

Holt summarises the most important indications for varying the percentages as follows: if not gaining in weight and with no special signs of indigestion, increase proportions of all ingredients; if habitual colic, diminish the proteids; for frequent vomiting soon after feeding, reduce the quantity; for the regurgitation of sour masses of food, reduce the fat and sometimes the sugar; for obstinate constipation, increase both fat and proteids.

The criticism may be made that this system or method lacks accuracy. That it has the accuracy of the laboratory methods is not claimed, but all breast milk is not the same. All children would not thrive on the same breast. The most recent analysis shows that it is subject to rather wide variations in composition even when the nursling thrives in a normal way. This proves that the average infant can tolerate rather wide variations in its food without trouble and that extreme accuracy in the proportions of the constituents is not essential.

CONCLUSIONS.

1. The modification of cow's milk for infant feeding may safely be done at home under the care of the mother, or nurse of ordinary intelligence, and is preferable to guess work.

2. It is based upon the known composition of mother's milk, and also upon the known dissimilarities between it and cow's milk, especially in the proteids.

3. The method of home modification and of calculating the percentages should and can be made extremely simple, and such modifications can be made sufficiently accurate and uniform.

4. The addition of cereals to the milk in the form of barley or oat-meal water is generally desirable after the seventh month, and is desirable before that age in some cases as an aid to the digestibility of the milk.

Some Diseases of the Respiratory Tract from the Viewpoint of the Pension Examiner.¹

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

AMONG the commoner ailments of claimants for pension are "catarrh" and "disease of the lungs," these being the two general divisions which the civil war soldier makes of diseases of the respiratory tract. It is the common belief among old soldiers that a pneumonia contracted and suffered from in the service, has left behind it conditions which can be localised and differentiated even at this late day. Again, it is quite generally believed that pulmonary lesions, secondary to acute disease of the lower air tract suffered from in earlier life, remain as distinct factors of ill health, to be located, described, and rated forty years later.

THE UPPER AIR TRACT. -

The respiratory tract may be divided for convenience into two general topographical sections—upper and lower. The upper air passages extend from the nasal orifices to the larynx; all below that organ belong to the lower tract. In the upper area are situated the nasal cavities, the pharynx, and the larynx; in the lower are located the trachea, bronchial tubes, and air vesicles. The latter two groups are surrounded and held together by parenchymatous lung tissue, the whole constituting, in general terms, the lungs. We need not deal, at this time, with the pleura, because it is not, strictly speaking, a breathing organ.

Of all the diseases to which the upper air tract is liable, nasal catarrh is by far the most common. It afflicts all ages, conditions, and every environment of mankind, though some localities are remarkably free from it. Others, however, as for example, the North Atlantic seaboard and the great lakes region, are noted for its prevalence. While, therefore, it is not, strictly speaking, a climatic disease, yet climate exercises great influence over its general existence or severity—one or both.

It may be stated, in general, that moist atmospheres with sudden changes of temperature predispose to catarrhal diseases. It must not be forgotten, too, that rheumatic and gouty diatheses are underlying etiological factors of great moment in predisposing to catarrhal inflammations of the respiratory tract, especially in the nasopharynx, and this makes the subject one of additional interest to pension examiners.

1. Read by invitation at the Lake Keuka Medical Association meeting, August 12, 1903.

NASOPHARYNGEAL CATARRH.

However, before entering into details let us for a moment consider a few general features that lie at the threshold of the topic. In the first place there are many misconceptions relating to so-called nasal catarrh both among laity and physicians. The former quite generally believe that the disease leads ultimately to ulceration of soft parts and necrosis of bone; that it "runs into consumption;" that inflammation of the air tract is liable to be followed by similar conditions in all the cavities lined with mucous membrane, such as the stomach, intestinal and genitourinary tracts; in short, that all the mucous membranes are weak, nasal catarrh being an index of the fact. There is no just ground for such belief.

Physicians know that simple catarrhal inflammation of the nasal passages results only in hypertrophy of the tissues, whereas ulceration and necrosis belong to syphilis or some other systemic dyscrasia. While there is no doubt that chronic catarrhal inflammation tends to weaken tissue resistance and that it even may cause pharyngitis, laryngitis, or bronchitis, the disease, however, does not change its type and become tubercular in character. It has been asserted that a person with aggravated catarrhal disease of the upper air tract, and who has a family history of phthisis, is more liable to contract consumption than would be the case if the upper air tract were free from disease. I am not aware, however, that this asseveration has been sustained by any established clinical observations. So, while we may admit the tendency of catarrhal inflammation to travel downward, invading even the lower air passages, it still remains in its new location the same type of disease,—a true catarrhal affection.

It is, perhaps, unfortunate that a word which describes only a symptom should be so generally accepted as the name of a disease; and yet this is precisely what has happened with the word "catarrh." The Greek origin of the word signifies "to flow downward," *i. e.*, a discharge, and when we use the term nasal catarrh we mean that the person has a nasal discharge, acute or chronic, as the case may be. If we say a person has chronic nasopharyngeal catarrh, we mean he has a chronic catarrhal inflammation of the upper air tract.

The clinical picture of an ordinary catarrh may be stated as, first, a liability to take cold; second, swelling of the tissues and obstruction of the nasal air space; third, accumulation of thick mucus in the fauces. These are the three prominent factors all more or less intimately associated, and following each other in such rapid sequence, that it becomes difficult oftentimes, to

locate the lesion. But it is highly probable that in most instances nasopharyngeal catarrh is a hypertrophic rhinitis, and that the latter in turn depends upon a deformed septum for its origin. Acute rhinitis, that is, acute inflammation of the mucous lining of the anterior nasal passages, is a disease of frequent occurrence, and when often repeated in a given case leads to the chronic form known as hypertrophied rhinitis. The location of the latter is most often the inferior turbinates, though the middle turbinates become similarly affected.

Since deformities of the nasal septum play such an important part in the causation of catarrhal diseases of the upper air tract, it becomes of interest to inquire for a moment into the etiology of these deviations. The weight of testimony would indicate that, first, traumatism plays an important part in producing septal deviations. I do not mean by this that there must needs have been a serious external blow, one, for example, hard enough to cause external deformity or fracture of the nose, or to visibly deflect or displace the septum. But, in young life, while the parts are soft and plastic, a fall on the face may cause a rupture of some of the sutural attachments of the septum, or push the cartilaginous septum against the vomer, or the perpendicular plate of the ethmoid, sufficiently to set up a mild form of inflammatory action. It is easy to conceive that from such a blow morbid processes may readily result in an angular deflection which, in a few years could and probably would cause limitation of air space and obstruction to breathing.

In a few years more, or even after the lapse of many years, new conditions arise, new environment takes place, new exposures are made, which singly or combined set up chronic hypertrophic inflammation of the mucous linings of the nares. It requires no stretch of the imagination to comprehend that such a morbid lesion is the result of a slow process of development, giving rise after many years to chronic catarrhal conditions, and that the original starting point is a slight injury received in childhood or infancy which attracted no attention whatever. The great point to be borne in mind is, that chronic nasal catarrh witnessed in adult life and old age, may be the result of a morbid process beginning in infancy in a traumatism so slight as to attract no attention, except that the child has "bumped his nose." This is entirely compatible with the history of disease and, in my view, accounts for the fact that so much chronic nasal disease is observed among old soldiers.

Again, in looking for causes we must not forget that the acute infectious diseases of childhood play an important rôle, etiologically speaking, in the chronic catarrhal diseases of the nasal pas-

sages of after-life. In a child that has already a deflected septum from causes just mentioned, measles, scarlet fever, diphtheria, and even typhoid fever, may leave as sequelæ the slow inflammatory processes that in later years cause serious nasal obstruction.

Still again, irritants such as exposure to cold, foreign bodies, hot air and steam, fumes of gases like chlorine, bromine, and ammonia, together with many other vapors, besides dust from elevators, mines, and factories, act with great direction and insistence upon nasal passages already prepared and made sensitive, by conditions set up in the manner described during early life.

That systemic diseases, such as gout and rheumatism and allied conditions, act as predisposing causes of nasal disease is an admitted fact, while age must be reckoned with in this relation, the resistance being greatest in adult middle life, and least in youth and old age.

Let me invite attention for a moment to the serious nature of the malady commonly designated as nasopharyngeal catarrh. Too often it is considered lightly, or as having no special importance,—little more in fact than a wart or a corn. It is, however, a disease of serious potentiality as every experienced physician knows. Obstruction of the nasal cavities often causes mouth breathing, which is a most unfortunate condition. This method of breathing not only renders the individual more liable to infection through the inspiration of germ-laden air but, likewise, it causes throat irritation, bronchial catarrh, and, indeed, may lead to serious pulmonary disease.

Stenosis of the nasal passages is one of the earlier symptoms of chronic nasal catarrh,—usually there being an alternating stenosis of the two passages. This latter phenomenon Bosworth believes to be pathognomonic of deflection of the septum. The effects of nasal obstruction if grouped would make a long list. Here are a few: (1) swelling or redness of the external nose; (2) intolerable itching of the nostril; (3) headache; (4) vertigo; (5) elongation of the uvula; (6) hypertrophy of the tonsils; (7) deformity of the chest; (8) spasmodic cough, asthma, and hay fever; (9) aphonia; (10) snoring; (11) constant or oft recurring catarrh of the pharynx, larynx, trachea, and bronchi; (12) perversion of the senses of smell and taste; (13) deafness; (14) eye affections; (15) stammering; (16) dyspepsia and gastralgia; (17) palpitation of the heart; (18) muscular rheumatism.

That the voice suffers changes in catarrhal disease is a fact of common observation. This in part is due to partial closure of the nasal chambers, and in other part to the laryngeal hyperemia secondarily set up by the catarrh. Various ear troubles are well known to arise from nasopharyngeal catarrh. Impaired

hearing may develop either from nasal stenosis, or by extension of the inflammatory process to the tympanic cavity. Numerous neoplasms of the respiratory tract are attributable to nasal disease, and it is debatable also whether malignant growths may not arise from the same source, cases having been reported that tend to substantiate that view. Diseases of the accessory sinuses, too, frequently take their origin in obstructive nasal disease, drainage of these cavities thereby being interfered with. Finally, neuroses of the respiratory tract, as well as neuroses affecting other parts of the body, are sequelæ of nasopharyngeal disease,—an important fact to be remembered.

I have by no means exhausted the list of conditions and morbid changes, that have their beginning in catarrhal inflammations of the upper air tract, but enough have been enumerated to serve the purpose of this occasion, which chiefly is to point out the grave possibilities lurking in the train of what is called a "simple catarrh." In other words, there is, I asseverate, no such simplicity in this affection as is popularly believed, and too often is permitted to go undisputed by physicians.

There are obvious reasons why this discourse must limit itself to a cursory general view of the subject. It is, however, one that all examining surgeons are necessarily very much interested in, because they have to deal with it so frequently, either as a local condition or in its remote general effects. The old soldier suffering from the malady is entitled to great consideration. He is ignorant of its import, hence easily falls a prey to the horde of quacks whose methods appeal to his prejudices. He may have a simple form of the disease so far as its local manifestations are concerned; for example, one in which a slight operation may offer relief or cure, such as removal of a bony spur from the septum; or the snaring of an adenoid; or, again, the incising of an obstructive turbinate. But he is content to rely upon an advertised "catarrh cure," rather than to consult a laryngologist; indeed, his impecunious state is often a bar to an indulgence in that luxury. Moreover, often the gravest conditions cause the least distress; whereas, slight lesions may produce intense irritation. The first are neglected until great, perhaps irreparable damage is done; while the second are treated tentatively by incompetent persons. For these and other reasons not necessary here to enumerate, I repeat, the old soldier suffering from chronic affections of the upper air tract, is entitled to the best attention and most considerate judgment of the examining surgeon.

THE LOWER AIR TRACT.

Passing now to a brief consideration of the diseases of the lower respiratory tract, we find the field somewhat limited if we

are to consider only such as have their origin in the civil war service. The acute diseases are necessarily eliminated from the discussion as far as concerns pension examiners. Of the chronic forms phthisis pulmonalis is practically set aside as a primary affection, because those who contracted it in the military service during the war of 1861-5, are either cured or have gone to their reward, though there are many cases resultant from the Spanish War. It is, however, quite possible that occasional cases of tuberculous lung disease may yet be seen as secondary to some other form of affection either in the respiratory tract or other organs among Civil War soldiers. In my experience it is a disease rarely seen in the examining room of the pension surgeon. At all events, it is of easy recognition and comparatively of short duration. In its first stage it is susceptible of cure, but unfortunately it is not often seen early, and in its later stages it usually becomes fatal within a short time.

CHRONIC BRONCHITIS.

A disease of frequent occurrence among old soldiers is chronic bronchitis, which is a catarrhal affection of middle or advanced life. It may appear as the result of repeated acute attacks, but more commonly as we see it, it is a primary disease assuming from the beginning a chronic type. Its development in most cases is gradual, extending over a period of years. Generally speaking, the symptoms are most marked in cold weather, and the "winter cough of the aged" is a form of the disease that is recognised by clinicians, as well as by the laity. Cough is, perhaps, the most troublesome symptom which unfortunately occurs chiefly at night, followed frequently by free expectoration in the early morning hours. It is associated many times with the gouty and rheumatic diatheses and occurs, too, in diabetic subjects, while it is common in both subacute and chronic forms in persons who drink vinous or alcoholic liquors. The presence of toxic elements in the blood seeking exit through the bronchi, serves to keep alive a chain of symptoms difficult to control, or impossible to cure.

It is essentially a disease of the larger bronchi, but there is always a tendency to exacerbations more or less acute, that may cause extension to the smaller tubes, and if they become obstructed serious results may ensue. Broncho-pneumonia, too, may result from further extension to the capillary bronchi. However, the most common sequelæ in long standing cases are pulmonary emphysema, and bronchiectasis, to which co-existing asthma may forcefully contribute. To these dangers must be further added the liability to dilatation of the cavities of the right heart with consequent pulmonary engorgement, congestion of the liver or other viscera, and lastly, edema of the extremities.

Chronic bronchitis is not classed, in itself, as a dangerous malady, at least not immediately so; but, indirectly, from its aggravating effects upon other disorders it may cause death from the complications it creates. Constant coughing, too, may further weaken a dilated and already laboring heart. Hemorrhages sometimes prove temporarily beneficial by relieving pulmonary congestion, but by and by, especially in feeble or aged persons, secondary manifestations may prove fatal. For these and other reasons chronic bronchitis is not to be regarded with indifference or as a slight affection in the old soldier. After secondary changes have taken place in the tubes it is incurable, hence treatment can only palliate. The tendency of rheumatic subjects to develop bronchitis is very marked, and such cases should be guarded against exposure with extreme care.

ASTHMA.

One of the affections of the respiratory tract quite common among Civil War veterans is asthma. It is generally admitted to be a neurotic affection, characterised by spasm of the bronchial muscles and often associated with hyperemia of the bronchial mucous membrane. Since Hyde Salter's exhaustive treatise on asthma, published in 1860, many investigators have studied and written upon this fickle malady, yet none has disturbed his assertion of the neurotic character of the affection. Bosworth thinks it is a vasomotor bronchitis, and that the lesion in a paroxysm of asthma is a vasomotor paresis of the bloodvessels supplying the bronchial mucous membrane.

In my examination of soldiers I have been impressed with the frequency in which asthma was claimed, and with the comparative infrequency that physical signs of the malady were detected. I have been curious to learn whether the observation of other examiners corresponded with my own in this respect. I further observed that in all cases in which asthma was claimed and described there was intranasal disease of some variety, frequently associated, too, with bronchial catarrh.

In reflecting upon the subject I recalled a conversation with Bosworth held many years ago, in which he directed my attention to the relation of lesions of the nose and nasopharynx, to so-called asthma. I did not pay much heed to the subject at that time, but since the observations made in pension examinations it came back to me with much force. As this subject may be regarded as of some importance, I will quote from Bosworth's published writings somewhat in extenso.

About the time of our conversation it appears that Bosworth was preparing a paper on this very subject which later was pub-

lished. In that monograph he asserted that "a large majority, if not all, cases of asthma are dependent upon some obstructive lesion in the nasal cavity. This is evidenced by the immediate relief from the exacerbation by the use of cocaine in the nose, in every case in which I have tried it, and, furthermore, by the cure of so many cases by the removal of the obstructive lesion in the upper air passages".

In another place, writing a few years afterward, Bosworth confirms this opinion, and further explains the fact, by pointing out the intimate relationship between the nose and lower respiratory tract, asserting that the respiratory functions of the nasal mucous membrane were overlooked until very recently; that even as late as 1878, Remy alluded to the nose as the organ of olfaction, asserting that its other functions are purely secondary and adventitious; that the great water-secreting function of the nasal mucous lining is not for phonation and olfaction, but for respiratory purposes; that the most intricate, most delicate, and most important part of the whole respiratory tract lies in the nose; that it resides in the turbinated tissues; that these bodies supply inspired air with moisture, pouring out upon their surfaces 16 ounces of water in the course of twenty-four hours; that in this way the inspired air becomes saturated with moisture, and that this function is regulated with such nicety, as to meet the changes from dry to moist atmospheres and the reverse, often sudden in character; all of which goes to establish a most intimate connection between the upper and lower portions of the respiratory tract. He then affirms that the blood supply of the nose being regulated by the same vasomotor tract as that which regulates the blood supply of the bronchial tubes, a disturbance in one region renders the other especially susceptible to disease processes, and that a diseased condition in the nasal cavity may predispose a neurotic person, under favorable atmospheric conditions, to an attack of asthma. I have not in this excerpt attempted to give the author's precise language, but offer merely a resume of his ideas. Other observers, writing at later periods, have confirmed Bosworth's studies.

From these premises, admitting their validity, which there is no reason to doubt, it must be affirmed as an established principle that intranasal disease, and especially when the nasopharynx is the seat of the lesion, is not only a predisposing but an exciting cause of paroxysms of asthma. True asthma is rarely associated primarily with cardiac disease, but the dyspnea attending the latter bears a resemblance to spasmodic asthma. Old soldiers almost universally complain of heart trouble, but comparatively few suffer from real disease of that organ. They often are

afflicted with palpitation and other cardiac neuroses that arise from intranasal disease, and their asthmatic symptoms in general have a like origin. It becomes important to discriminate between idiopathic and pseudoasthma,—between the true disease and the reflex variety. This is not always easy, because there is nothing peculiarly pathognomonic in the symptoms or physical signs of nasal asthma, the paroxysms being identical with those caused by other lesions, except that preceding and after the attack the râles are dry, while in bronchial asthma they are moist.

CONCLUSIONS.

I do not speak from the standpoint of a laryngologist nor yet as an expert in diseases of the chest, hence cannot present the delicate points of the subjects of this discourse with the force and impact of the trained and skilful specialist in these branches; but I have aimed to give my own views based, perhaps, on no inconsiderable experience and observation, which have extended over a period of many years. I offer them to you for whatever value you may choose to place upon them, not dogmatically or with claims to original thought. Nevertheless, I shall have failed in my purpose if I have not accentuated a few important facts, with sufficient force for them to challenge consideration at your hands. They may be succinctly stated as follows:

First, that a person suffering with obstructive intranasal disease,—chronic nasopharyngeal catarrh,—is not laboring under a mere inconvenience, but has a malady that involves very serious danger, a danger that increases as years advance, and that, uncured, is a constant menace to the integrity of the lower respiratory tract.

Second, the neuroses dependent upon nasal obstruction are often as serious in their symptomatology, as they are distressing to the patient. They affect not only the respiratory tract, but the heart and other organs, often masking the real disease to an extent that may embarrass the examiner in making a differential diagnosis.

Third, that chronic catarrhal bronchitis is a disease of potential importance, slow in its progress, often depending upon nasal obstruction as a primary factor of cause, and is of most serious import in the aged.

Fourth, that asthma is, for the most part, a reflex manifestation of nasopharyngeal disease, generally obstructive in character; that it is seldom idiopathic, but its paroxysms are similar whether it be true or false, whether it be reflex or bronchial; and that its chief importance is as a symptom of disease located elsewhere, spasm of the bronchial tubes being a distressing expression of the lesion.

Fifth, that those diseases of the respiratory tract to which the veteran soldier is peculiarly liable, are often expressions of the rheumatic or gouty diathesis, and that these dyscrasiæ are often underlying factors to be reckoned with in reference to origin as logical sequences of pathology.

As a final thought, permit me to suggest that it does not require much mental elasticity or any distortion of facts, to affirm that a Civil War veteran suffering from chronic catarrhal disease of the respiratory tract, is as much entitled to rating and pension as though he were shot in battle. Such a man who, in childhood, received a slight injury to the nose, causing deformity of the septum, and in young manhood through exposure in the military service, contracted intranasal disease which later, after the development of rheumatism, appears as chronic rhinitis, bronchial catarrh, or pseudoasthma, is entitled to serious and considerate treatment at the hands of the government.

For these and other reasons that need not be multiplied, it becomes of the utmost importance for examining surgeons to give becoming weight to these maladies and their ratings. There is abundant reason to believe that the pension bureau desires the most careful consideration of the claims of the veteran at our hands, to the end that his interests be safeguarded on the one hand, and that the government be protected from imposition on the other; and especially does it desire to be generous rather than niggardly, in dealing out its largess to the defenders of the nation's honor. It is in this spirit that I have presented this brief paper.

284 FRANKLIN STREET.

A Critical Clinical Study of Hedonal.

By A. TOEPFER, M. D., Jersey City, N. J.

IT IS a matter of common observation that while our resources for combating comparatively trivial diseases are quite meagre, this assertion does not hold good for the more serious maladies. What physician has not been impressed with the inadequacy of our medical knowledge in the case of toothache, or coryza, or lumbago, or dysmenorrhea, and the like, although his skill often succeeds in bringing to a favorable termination the dangerous inflammatory diseases? How often is not the physician compelled to give evasive answers when requested to relieve insomnia: for while the *materia medica* contains drugs which will produce narcosis, sopor, and coma, they are far from being capable of causing natural physiological sleep. For this reason when my attention was drawn to a number of reports from prominent European

clinicians on the value of hedonal in conditions of simple sleeplessness, I was led to give it a trial in order to determine how far these laudatory statements were justified by the results of my own experience.

Hedonal is a derivative of the urethane group, and appears in the form of a crystalline white powder, almost insoluble in cold water, but easily dissolving in hot water and alcohol. It has a somewhat disagreeable, minty taste, which is accentuated when it is administered in water. In spite of this fact, however, it is well tolerated by the stomach, and during continued use any existing aversion soon disappears.

The best form of administration would undoubtedly be in tablets coated with chocolate, but as these are not obtainable in America I have given it in capsules, which, though less convenient, have proved satisfactory. I have also administered it in wafers, although some of the patients objected to their size. The suggestion to prescribe hedonal in a mixture with brandy and syrup is less applicable than the simple administration in an emulsion in water with gum arabic, because hedonal sometimes has a diuretic effect, thus disturbing sleep, and as the addition of alcohol, owing to its stimulating effect upon the heart, has a similar action, their conjoint administration might increase the chance of this taking place. It is further advisable to give no fluids for several hours before the administration of hedonal, so that the quantity of urine eliminated is diminished as much as possible. This diuretic action was observed by me more frequently in men than in women. I also noticed that if this effect manifested itself at all it persisted during each subsequent administration. I met with but few cases, however, in which the desire to urinate robbed the patient of further sleep, the majority promptly falling asleep again. On the other hand, the observation that the hypnotic action of hedonal is impaired by the previous ingestion of a hearty meal is based upon actual facts. According to my experience, at least three hours should be allowed to elapse before an ordinary meal and the administration of hedonal. If the patient, however, take a light repast or a little fruit, it does not interfere with the effect of the drug.

Another peculiarity in the action of hedonal was observed by me in a few instances,—namely, if the patient for some reason or other had taken a dose of bicarbonate of soda and hedonal was administered shortly thereafter, its hypnotic effect was less decided. If, however, some acid remedy was taken the hypnotic effect was strongly manifested.

Whether the sleep produced is dreamless, as maintained by some, I was unable to determine. I can positively state in regard

to myself that after taking hedonal I woke up dreaming, as is my custom. What is of more importance, however, is the question as to the conditions necessary for the occurrence of sleep. Hedonal is not an absolute hypnotic which manifests the same effect at all times and in all persons, its action depending upon certain requirements. Just as normal sleep implies a condition of restfulness of the central nervous system, there must be present a desire for rest and sleep if hedonal is to act. If this is wanting, whether in consequence of marked psychical excitement, especially if it be due to anxiety or fear, or the result of alcoholic excesses, the hypnotic effect frequently fails to manifest itself. On the other hand, if the sleeplessness is caused simply by mental depression or mental strain without the mind being concentrated upon a concrete subject, the effect leaves nothing to be desired. It is true that two cases of this kind came under my observation in which hedonal failed to act even in increased doses, but I could notice no difference between these and the other cases, since no objectively demonstrable reason for the inequality of its action could be discovered.

In the presence of pain I have not employed hedonal as a hypnotic, having always found aspirin a sovereign remedy for this purpose. If, however, after the removal of the pain the sleeplessness persists a dose of hedonal proves a valuable auxiliary. Whether experience will confirm my observations that in conditions of psychical excitement the mental equilibrium necessary for the occurrence of sleep is restored by a previous dose of aspirin, I am unable to decide positively. Sleep usually occurred one-half to one hour after the administration of the drug, the most rapid results being obtained from the larger doses, as I had occasion to frequently observe. In regard to its character, the sleep cannot be distinguished from the normal slumber, which is in itself shown by the facts, that the patient assumes an easy position, that the respiration is regular and not stertorous, and the pulse remains normal. For the latter reason the diuresis, which occasionally occurs, cannot be attributed to an increased pressure in the renal capillaries; it must be a direct consequence of the irritation of the epithelia of the glomeruli. As to the duration of the sleep produced by hedonal no exact data can be given. In the cases observed by me the time of continued sleep varied from two to five hours, the patients usually falling asleep again.

One factor which distinguishes hedonal from all other hypnotics is its property of leaving the physical and mental powers unimpaired. It is true that in making this statement I rely upon tests made upon myself, since confirmatory control experiments were not for obvious reasons available. It has happened that

within a short time, only two or three hours after taking a dose of hedonal at night, I was awakened by a call, and found myself mentally and bodily as active as one is accustomed to be when aroused from natural sleep. This freedom of the drug from any influence upon the mental and bodily powers I have failed to note in any other hypnotic, although I have tested the entire list; for since my fiftieth year I have often experienced difficulty in falling asleep for a number of hours after having been disturbed at night. At the present time I take refuge in hedonal in that event. Another advantage of hedonal which ought not to be underestimated is its property of not interfering with the pulse, a quality which is lacking in all other hypnotics.

Unpleasant by-effects, such as eructations or vomiting, have been observed in a slight degree in a few instances. A slight feeling of vertigo, easily controlled, followed occasionally after large doses soon after its administration, sometimes while urinating. Some persons taking the drug for long periods remarked during the day a transient itching in various parts of the body, usually the scalp. Injurious effects were never noted. According to the literature published, a few authors have observed a weakening of the hypnotic influence after the prolonged administration of the remedy. My control experiments lead me to a contrary opinion, although I have always resorted to medium-sized doses. Cumulative effects seem to be absent with hedonal.

In regard to the indications I have always confined myself within the narrow limits of insomnia unattended with pain, without, however, neglecting to ascertain what special conditions of sleeplessness are most favorably influenced. Unfortunately, I must confess that my endeavors in this respect have not afforded me any special data, since the majority of my patients suffered with simple sleeplessness in consequence of advanced age, while the others comprised hysterical, neurasthenic, gouty, diabetic, melancholic, and alcoholic persons. The effect in children and young persons could not be determined, the age of the youngest patient being 35 years. The dose is not fixed, one is relieved by a small dose, and another by a large one. In all cases I commenced with 15 grain doses, and if the effect was satisfactory this was continued. The administration of two successive doses in the evening seemed to me unsuitable for determining the individual dose. If the first dose failed to afford the desired effect, then I increased it by one-half on the following night. If this dose (22 grains) did not induce several hours sleep I added another seven grains on the following night, but never exceeded one-half drachm, although in the literature cases are reported in which far larger doses were given without any ill-effects. Fifteen grains were

sufficient only in the minority of cases, mostly women, without the necessity of increasing the dose. In the majority 22 grains were required, while 30 grains were necessary in a number of cases of neurasthenia with marked nervous excitement.

The following cases will serve to illustrate what has been said above:

Case I.—Mrs. R., 40 years old, member of a strongly neuro-pathic family, extremely eccentric. She presented aside from occasional sleeplessness no objective signs of disease. Her usual condition of sleep is as follows: she falls asleep at once on retiring, but wakes up after one or two hours and remains sleepless for the rest of the night. She was ordered to take hedonal, 15 grains, in two gelatin capsules as soon as she awoke, with the following result: she slept uninterruptedly until six o'clock in the morning, sleep ensuing one-half hour after taking the drug. She felt much invigorated and did not experience the slightest inconvenience.

Case II.—Mrs. H., 38 years old, a well-built blonde of hysterical tendency; married twice, her second husband being a young man. In consequence of this she was extremely jealous. In the presence of strange women the slightest inattention on the part of her husband was always followed by attacks of weeping and sleeplessness. Being consulted on one of these occasions I administered hedonal, 15 grains, with the result that three-quarters of an hour after its ingestion a quiet sound sleep ensued. She was compelled, however, to get up to urinate, but immediately fell asleep again. She now takes the remedy whenever required.

Case III.—Mr. S., a robust man, 50 years old, subject to going on sprees, but a total abstainer during the intervals, frequently suffers from insomnia and restlessness at night. The first dose of hedonal, 15 grains, had no effect. On the following night he received 22 grains, and an hour later he became somnolent and failed to hear the striking of the clock, but only once, for after that he heard it each time. On the third night I prescribed 30 grains of hedonal, and this was found to be the appropriate dose for producing quiet invigorating sleep until morning. If later he reduced the dose the result was always a failure.

Case IV.—I, myself, experimented with hedonal for several weeks in order to test its action upon the psychical and intellectual faculties. One evening about 10 o'clock, I was called to a patient who had suffered for two hours from violent nose-bleed. At midnight I finally succeeded in stopping the hemorrhage. Being exhausted and having been deprived of my sleep, I took 22 grains of hedonal before retiring. Sleep must have occurred at once, since I cannot remember having heard the clock strike. About two o'clock, however, my night bell rang, and my first thought was of the old gentleman and of the possibility of a recurrence

of the epistaxis, but fortunately it was a different affair. A man desired a remedy for relieving his wife of a violent attack of colic. Notwithstanding that when I was aroused I was in the first stage of hedonal sleep I experienced neither dizziness nor a dulling of the senses, so that I was perfectly able to think over the case and dispense the proper remedy. A severer test in regard to the complete innocuousness of hedonal in reference to the mental and bodily power could not be readily found.

I would formulate my conclusions based upon my observations (25 cases) as follows: in all uncomplicated cases of sleeplessness hedonal is a quite reliable and absolutely harmless hypnotic, this being due to the fact that it is oxidized in the organism into carbonic acid, urea, and water, and is free from any poisonous decomposition products. Even when employed for a long time its effect is not impaired and it promises to become a real blessing to the many sufferers from insomnia.

283 CENTRAL AVENUE.

CLINICAL REPORT.

From clinic of L. G. HANLEY, M. D., at the Buffalo Hospital of the Sisters of Charity.

REPORTED BY DRs. WASHBURN and HIGHLAND, Hospital Internes.

I. MIXOSARCOMA OF RIGHT OVARY. OPERATION—RECOVERY.

Mrs. S., age 53; nativity, Irish; mother of six children, menopause occurred eight years ago; family history good; mother died at the age of 93; father died of cholera, age 30. She has never had any disease until two years ago, when she complained of dragging pain in the abdomen, and noticed, as she says, that she was getting large. She presented herself to hospital for operation.

On examination by palpation, the abdomen seemed to be greatly distended with fluid, and within this cavity was a rather large tumor easily movable. Patient prepared for operation. On opening abdomen two gallons of syrupy, strawcolored fluid were removed. A tumor of right ovary, measuring $11\frac{1}{4}$ inches long, 8 inches broad and 4 inches deep, weighing $6\frac{1}{4}$ pounds, was also removed. In attempting to deliver the tumor, it ruptured on its lower border: the intestines, omentum, peritoneum, were covered with metastases. Microscopical examination showed it to be a mixosarcoma of the ovary. Examination made at the Cancer Laboratory, Buffalo University. The tumor presented several areas of hardened tissues; also a gelatinoid condition. The

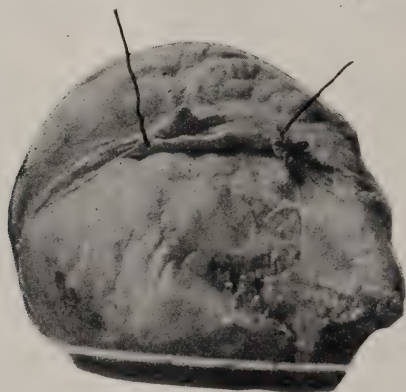
photograph indicates its general appearance. Patient left hospital September 1.

II. HEMATOCOLPOS CONGENITAL.

Miss K., aged 16; admitted to hospital June 1, 1903, had been complaining for two years; patient anemic, poorly nourished. There was complete occlusion of orificium vaginae with a marked protrusion of vulva, measuring 4 by 3 inches, which was increased by making pressure over region of uterus. Patient was prepared for operation and an incision $1\frac{1}{4}$ inches long was made in the direction of the normal opening; the membrane was one-fourth of an inch thick; two quarts of grumous blood, the consistency of melted chocolate, were drawn off from the vagina; there was

Fallopian Tube.

Fimbriae.



HANLEY—MIXOSARCOMA OF RIGHT OVARY.

also hematometra; discharge continued for two weeks. During irrigation it was noticed that the large cavity in the vagina kept gradually contracting until there was complete cessation of discharge. Patient left the hospital three weeks after operation.

III. APPENDECTOMY. OXYURIS VERMICULARIS IN APPENDIX.

Mrs. S., aged 35; had been ailing for sixteen months and treated, as she says, for one continued attack of appendicitis. Symptoms complained of when admitted to hospital were bloating, pain in right iliac region and at night as though there was a crawling, tingling sensation, which prevented her from sleeping. Patient prepared for operation, though I was not satisfied there were sufficient evidences of appendicitis. Yet, placing a great deal of confidence in my confrère, who directed the case to me, I decided to operate.

The appendix was about 4 inches long, somewhat thickened, with no appearance that there had been any severe inflammatory action. It was removed. On splitting it open it was found to be filled with thread worms—oxyuris vermicularis. Irrigation of bowel, with saline solution, revealed the presence of numbers of this parasite.

I see no reason why this parasite could not invade the appendix as well as the other part of the alimentary tract, but to me it is the first time that I have discovered the presence of this worm in the appendix. It is my custom to open all appendices after their removal, and in upward of 500 cases, this is the first time I have observed such a complication.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

REPORTED BY E. A. BOWERMAN, M. D., Secretary.

Special Meeting, Tuesday, September 8, 1903.

The meeting was called to order at 8.50 p. m. by the president, Dr. JOSEPH W. GROSVENOR, who announced that this was a special meeting of the Academy, called to consider a proposed ordinance to lessen accidents from 4th of July explosions and from bonfires.

As General William S. Bull, Superintendent of Police, and Edward Murphy, Assistant Chief of the Fire Department, were present by invitation, on motion the privileges of the Academy were extended to them.

Dr. LUCIEN HOWE presented a proposed city ordinance intended to regulate the sale of fireworks and explosives and their use in the city streets, confining them to the parks, and providing penalties for violations.

This was discussed by Dr. Howe, Supt. Bull, Assistant Chief Murphy, Drs. W. D. Greene, Park, Blaauw, H. R. Hopkins, Wyckoff and Van Peyma.

Dr. Howe spoke of the number of accidents resulting each year in Buffalo from fireworks and called attention to other cities having ordinances restricting their use, naming Boston, Providence, New York, Philadelphia, Cleveland, Saint Paul and Louisville.

Supt. Bull condemned the toy pistol, toy cannon, giant firecracker and giant torpedo. He spoke of the difficulty of en-

forcing such an ordinance and hoped that any ordinance presented to the Common Council would be one capable of practical enforcement. He assured the Academy of the support of the Police Department in its efforts to obtain the enactment and enforcement of such a measure.

Assistant Chief Murphy spoke of the number of fires and amount of damage caused annually by fireworks. He said that a meeting of the fire commissioners, held this afternoon, commended the proposed action of the Academy and promised their coöperation.

Dr. ROSWELL PARK spoke of the prevalence of tetanus during July and the high mortality resulting from it, the disease in nearly all cases resulting from infection of wounds received by explosives. He also spoke of the great annoyance to and damage done the sick from the noise on the 4th of July.

Dr. H. R. HOPKINS called attention to the necessity of procuring the coöperation of other influential bodies, such as the Chamber of Commerce, in urging the passage of such a measure.

It was moved and seconded that the Academy of Medicine heartily approve the enactment of an ordinance restricting the sale and use of fireworks in Buffalo and that a committee of five be appointed to coöperate with other bodies in urging its enactment. Carried.

The President appointed Drs. Lucien Howe, Walter D. Greene, Roswell Park, Eugene A. Smith and Peter W. Van Peyma.

On motion a vote of thanks was tendered Supt. Bull and Assistant Chief Murphy for their presence and promised support. Adjourned at 9.50 p. m.

Attendance, 30.

PROGRESS IN MEDICAL SCIENCE.

Genitourinary and Syphilitic Diseases.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

ALBUMOSURIA.

C. R. BURR (before the Portland, Me., Medical Club, February 5, 1903,) stated that albumosuria signifies albumoses in the urine. It is a pathological state, usually unappreciated. It is

frequently confounded with peptonuria. The dividing line is very artificial. Many cases of albumosuria have been described as peptonuria, although deutoalbumose was present. This substance closely resembles peptone, hence the error.

Albumoses are intermediate products of digestion, four in number, to-wit: proto-, hetero-, dys-, and deutoalbumose. One is changed to another by hydrolic cleavage or absorption of water. Deutoalbumose absorbs water and becomes peptone, peptone absorbs water and splits up into the waste products of digestion, leucin, tyrosin, and the like. This hydrolysis is effected by the ferments or enzymes. The ferments are supplied by glands and bacteria. There have been described fifty varieties of intestinal bacteria. Some of these ferments form sugar from starch, some peptone from proteid and others disintegrate fat. If these products are not absorbed disintegration changes sugar into lactic acid and alcohol; peptone into amido-acid; leucin and tyrosin into skatol, indol and phenol; fats into voleric and butyric acids.

Peptone is the final product of proteid digestion and as such is absorbed. Peptones and albumoses are found in the chyme, but not in normal blood. Serum albumin takes their place in that fluid. Peptones are absorbed by epithelial cells and leucocytes, which dehydrate and change them into albumin.

Jones and Hunt, in Gould's American Year Book of Medicine and Surgery for 1902, propose a law which might be called the reversible zymolysis, to-wit: the continual removal of one of the products of a chemic reaction causes its continual formation, also that the accumulation of these products induce retarded reaction.

Hill (*Am. Chem. Soc. Jour.*, LXXIII.,) says that the enzyme will decompose or change maltose in dextrose and dextrose into maltose until a certain condition of equilibrium is established, that if one is removed the other is formed at the expense of the one present until equilibrium is established. The fat splitting ferment, lipase, will change ethyl-butyrate into its corresponding acid and alcohol, and out of these reconstruct ethyl-butyrate. Albumoses are not absorbed into the blood under normal conditions. Albumoses once in the circulation tend to remain until further digested. They appear in the urine as deuto-albumose and peptone. Proto-albumose and hetero-albumose in the blood are excreted as deuto-albumose, and deuto-albumose as peptone.

Gillespie believes that albumosuria is due to the excessive production and destruction of leucocytes. Clinically, albumosuria is found where there is leucocytosis, and peptonuria where there is

pus. The leucocyte has its own digestion ferment and can produce albumoses.

In leucocytosis there is a disturbance of the osmotic relations of the blood elements. The chlorids go to the cells and the albumins and phosphates to the serum. It is probable that a large part of the albumoses present in the blood of febrile cases is derived in this manner from the leucocytes. Dead leucocytes are digested, assisted by the ferments of pyogenic bacteria.

Pus contains serum, albumin, albumoses, peptones, leucin, tyrosin, cholesterin, and the like.

DETECTION.

Clinically, it is not necessary to distinguish between the different forms of albumoses present in the urine.

For their detection I prefer the methods given by Ogden, which are as follows:

1. Take a small portion of urine in a test tube, and warm gently. A precipitate appears which is redissolved on boiling and reappears on cooling.

2. Acidulate the urine with acetic acid, and add a few drops of a saturated solution of sodium chloride. A precipitate forms which disappears on heating and reappears on cooling.

3. Add a few drops of nitric acid to the urine in a test tube. If the acid is not in excess a precipitate is formed which disappears on boiling and reappears on cooling.

4. Add acetic acid, avoiding an excess, and then add a few drops of a solution of potassium ferro-cyanide (1.10). A precipitate is formed which disappears on boiling and reappears on cooling.

5. Completely saturate the urine at boiling point with neutral ammonium sulphate; filter and wash the precipitate with saturated solution of ammonium sulphate. Dissolve the precipitate in water or dilute sodium chloride solution and apply the beuret test. If albumoses are present a rose color results.

The beuret test is commonly applied in cases of peptonuria. It is unreliable because not only peptones, but albumoses and urobilin respond to it as well.

The only sure test is to proceed as in No. 5; that is, to saturate the urine (which should be acid in reaction) with ammonium sulphate, filter out the precipitate, and add to the filtrate either potassio-mercuric iodide or picric acid. If a precipitate appears it is peptone.

SELECTIONS.

On the Problem of the Determination of Sex.

By PROF. B. S. SCHULTZE, (Jena).

Honorary Fellow of the British Gynecological Society; of the American Association of Obstetricians and Gynecologists.

(British Gynecological Journal.)

THE Vienna embryologist, Schenk, started an idea that the sex of children to be borne by a woman might be determined by modifying her metabolism, but, so far as I am aware, his views have not been accepted in any quarter. The considerations underlying them had no sufficient scientific foundation, nor have they been confirmed by the results of the experiment.

Schenk, however, raised again the old, old question, why the development of an ovum should lead in one case to a male, and in another to a female offspring, and I have now before me two recent works upon it which lead to contradictory conclusions, and which, in my opinion, are inaccurate in the way the inferences made have been drawn. Doederlein¹ holds that the theory that the sex of the human ovum is determined before fertilisation cannot be upheld in the face of the fact, demonstrated by statistics, that men who are old in comparison with their wives beget a larger proportion of boys than agrees with the average number of males among all children born. Lenhosték² maintains that even in the ovary the ovum already has the character of sex, and denies that the husband has any influence upon the sex of the child.

In 1855 I expressed my opinion that all the conditions necessary for the development of either one sex or the other from an ovum were decided in the ovary, and wrote:³ "All twins with a common chorion, like all double monsters, are of one and the same sex; reported cases of the contrary always prove, when accurately investigated, incorrect, the apparent difference in sex turning out to be no more than an arrested development of the genital organs. When in connection with this we also consider the fact that actual hermaphroditism, the co-existence in one individual of testes and ovaries, of masculine and feminine germ-furnishing organs, has never been observed in the human being, nor, save perhaps in the most exceptional cases, in the other mammalia, it is evident that from a mammalia ovum only one sex, either masculine or feminine, can develop. Moreover, it is certain that, by the simultaneous fertilisation of more than one ovum, embryos of different sex may develop, and it is therefore probable not only that the cause of sex does not lie in the seed of the male, but rather that the condition for the development of the one or other sex are present in the ovum even in the ovary."

No one now maintains the old ideas that one ovary furnishes male, the other female ova; one testicle male and the other female seed; the evidence against them is too strong. Both boys and girls often enough have developed from the ova of one ovary after the extirpation of the other, and have been begotten by seed from one testicle after the removal of the other. Nor does anyone still believe that from an embryo, as long as it does not exhibit characters of its sex, that is to say, in the human being for about six or seven weeks, an infant of either sex may possibly develop.

Doederlein very justly says that it is not consistent with the view that an embryo already developing in the womb can be of undetermined sex to suppose that the father exerts any influence upon the sexual character of the offspring. Yet certain ascertained statistics offer very strong evidence of the action of such an influence. In the first place, the older the father is, in comparison with the mother, the more does the excess of male infants exceed the average proportion of male births (Hofacker, Sadler and others); and secondly, to breeders of horses and cattle it is a well-known fact that the stallion or bull upon whom more demands are made, which is allowed to cover sixty or even more females in the year, will beget a larger proportion of male offspring than one which has to fertilise only twenty or thirty females.

From the first of these facts Doederlein concludes that it is not right to suppose that the ovum is primitively endowed with a definite sex, "otherwise it is self-evident that the age of the begetter could not be a factor in the determination of the sex of the offspring." Of course it could not in that of the embryo from any particular ovum, but very well might be in determining the proportion of sexes born. It is quite possible that the seed of the older man is more adapted to fertilise male than female ova, and though we do not yet absolutely know that this is the case, I think it important to point out that the facts ascertained by Hofacker and Sadler are not conclusive proof that the ovum in the ovary is not of a definite sex.

Lenhossék argues in favor of the definite sex of the ovum in the ovary on the ground especially of thoroughly discussed biological analogies, as well as on that of the identical sex of uniovular twins. At the conclusion of his treatise he says: "Scientific research has, as we have explained . . . led us to accept as a fundamental fact almost indubitable, that in the animal kingdom the determination of sex is a prerogative of the maternal organisation, and precedes the fertilisation of the ovum." And on an earlier page: "Men must therefore resign themselves to the idea that to them no direct influence in the determination

of the sex of their children is accorded, and that this determination is entirely left to the organism of the female individual." The possibility of even an indirect influence he only admits so far as, for example, the peculiarity of having more male children, may be transmitted through the son to the granddaughter. The ascertained statistics of Hofacker and Sadler, which he terms suppositions and hypotheses, he treats as controverted, though to me they seem to be facts as well ascertained as the above-mentioned results in horse and cattle breeding.

The apparent contradiction between these facts and the theory that the ovum in the ovary has a definite sex disappears if we suppose that the seed of the older man is better adapted to fertilise the male than the female ova of the younger woman; that spermatozoa fresh from the testicle of an actively-employed stud male is more effective in impregnating the male than the female ova of the dam.

Or the hypothesis may be put in this way. The male ova derived from the ovary of a young woman offer more attractions to the spermatozoa of an older man than the female. The male ova of the dam are more accessible to spermatozoa coming fresh from the testicle of the covering male than the female, and the latter are, on the whole, more accessible to spermatozoa which have for some time been ready awaiting their discharge from the male organs.

It is at all events, certain that even the prerogative of the male to influence the comparative number of his male and female offspring is not inconsistent with the theory that even in the ovary the sex of every ovum is already decided.

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The Washing Out Plan—The Good It Fails to Do, the Harm It Does.

By ALEXANDER HAIG, M. A. and M. D., Oxon, F. R. C. P., London,
Physician to the Metropolitan Hospital and to the Royal Hospital for Children and Women.

(*Canada Lancet*.)

IN old times, 20 or 30 years ago, when nothing was known about the introduction of uric acid, when excessive uric acid was thought to be due to faulty metabolism, and when it was

believed that all the uric acid that was swallowed was promptly converted into urea, there was little left for the physician to do but to wash out the excess of uric acid by copious libations of water, combined or not with some alkali; and this he has proceeded to do, more or less, ever since, in spite of the fact which has recently become obvious to not a few, that the plan often fails to do very much good, and sometimes indeed does very much harm. Today, however, we know that the foundation of this pathology is untrustworthy, that all uric acid disease is practically due to swallowing it, and that the administration of large quantities of water does but little to clear it out, and thus fails in the object for which it is given. It has also become evident that in the largest class of uric acid diseases, viz., those of the circulation due to excess of uric acid in the blood (collemia), it not only fails to do the good expected of it, but very often indeed does actually produce infinite harm, even death itself.

And, first, as to its failure to do good.—In my book, *Uric Acid*, edition 6, page 194, I give notes of an instance in which in a morning hour the excretion of urine was only 53 c.c. per hour, and then a dose of opium taken without fluid ran it up in the next hour to 234 c.c. Here there was obviously plenty of water in the blood, but it was unable to get out till the opium cleared the blood of uric acid, so freeing the renal capillaries and allowing the water to pass. Obviously then, the uric acid in the blood controlled and kept back the water; the water in the blood did not control the uric acid. If a pint of water had been administered that morning before the opium would it have increased the excretion of water? Probably hardly at all, for there was a large amount of uric acid in the blood and it was obviously blocking the renal capillaries and keeping all the water in, and the water was scanty before the opium, not from want of fluid in the body and blood, but from blocking of capillaries by uric acid.

But there is one way in which excess of water may increase the excretion of uric acid, and that is by producing dyspepsia; for dyspepsia diminishes the digestion and absorption of food, and so diminishes the formation of urea and of acid products, and this produces increased alkalinity of the blood and so increased solution of uric acid, and, for a time, increased excretion of uric acid. Probably, at least, one portion of the dyspepsia, produced by the excess of water, is due to its diluting all the digestive fluids and rendering them less active solvents of the food substances submitted to their action. Thus, we may say, to complete this part of the subject, that the uric acid in the blood controls the excretion of water, and that the addition of water to

the blood does not control or increase the excretion of uric acid, but that to a certain extent, by diluting the digestive fluids and producing dyspepsia, the continued administration of excess of water does, to a small extent, increase the excretion of uric acid. It is now, however, quite unnecessary to give excess of water at all, for all uric acid disease is prevented by stopping the introduction of uric acid. A person who forms 10 grains of uric acid a day and swallows other 10 grains in his food, will have 20 grains of uric acid to deal with each day, and may suffer more or less severely from uric acid disease; but, if he will take the trouble to shut out the unnecessary 10 grains which he swallows with his food, he will gradually draw clear from excessive uric acid; he will have to deal each day only with 10 grains of the substance, and he will cease to suffer from the severe diseases which its excess in the blood and tissues produces.

But the practice of washing out with excess of fluids, which is due to an antiquated physiology, is still carried on, and it is therefore necessary to show up the harm which it only too often does. In arthritis, due to uric acid, it produces dyspepsia; dyspepsia increases the solvent powers of the blood for uric acid, and so the uric acid is dissolved out of the joints, and collemia, anemia and debility may take the place of the arthritis. The patient is cured of one form of uric acid disease only to suffer, and perhaps, to suffer very severely, indeed, from another form which is, perhaps, worse than the original. That he may get clear of his gout, is true, but this may be replaced by anemia, high blood pressure, with all its intracranial results, with mental depression and other troubles, and the danger of cerebral hemorrhage, or, before long, he may find himself suffering also from Bright's disease, dilated heart and dropsy. But the worst effect of this washing-out plan is seen in the far more numerous diseases which uric acid produces, through its effects on the circulation, those diseases which I have called the collemic group, of which Bright's disease is the worst type. The worst possible thing to happen in all collemic disease and that which makes the prognosis in Bright's disease almost absolutely hopeless, is heart failure, for Bright's disease may be defined as collemia producing defective circulation, the defective circulation being doubled, trebled and quadrupled by subsequent failure of the heart. Collemia itself means defective combustion, but that defective combustion is far more than doubled if the heart fails as well. Now, when the heart is fighting against capillaries obstructed by uric acid, when it has as much as it can do to keep up the circulation from day to day against these obstructed capillaries, it is obvious that a comparatively small matter may turn the scale against it

and lead to its dilatation and complete failure. Now, this is exactly what excess of fluid does,—it produces, as we have seen, dyspepsia, and dyspepsia produces defective nutrition, defective nutrition not only throughout the body, but of the most important muscle of all, that of the heart; and then we must not forget that a pint of fluid weighs a pound and a quarter, and that each pint of fluid more in the blood is $1\frac{1}{4}$ pounds more for the heart to drive. In this way excess of fluid does infinite harm,—it dilates the stomach and causes incurable dyspepsia, dyspepsia causes debility, and the fluid does also increase, to a very large extent, the work that the heart has to do. No wonder the heart fails and dilates; no wonder it ultimately becomes like the bulged outer casing of a bicycle tire, absolutely beyond repair.

Now, in recent years, I have seen quite a number of cases, of which I could give notes did space permit, who have gone through this treatment of washing out and have survived by accident as mere helpless wrecks with hearts which have been stretched beyond endurance and which will never again be fit for good work, lives which are crippled and which must live, if they live at all, on mere sufferance and as invalids. Some of these cases have told me that they were forced to drink pint after pint of water in spite of an absolute distaste and loathing for fluid, (see *Uric Acid*, Ed. vi., p. 30), for in this case nature says no with all the force at her command. They do not want water, as there is already excess of water in the blood and tissue fluids, but the patients are forced to drink and manage to get down several pints a day in spite of nature's protests and in excess of her requirements. Gradually, between dyspepsia on the one hand, and excess of fluid to drive and excessive obstruction of the capillaries on the other, the heart fails, and dilates, and gives up the struggle, and one day the patients take to fainting severely, or become more or less dropsical, and the worst that can possibly be done for these patients has been accomplished.

Perhaps in the great and extensive employment of water, in the present day of treatments for dilatation and failure of the heart, quite a large number of these cases are probably due to the absolutely unphysiological idea that uric acid can be washed out. It was nearer the truth to say that the patient can be washed out, and is not unfrequently washed out, but the uric acid remains, and, more insane of all, those people who go in for washing out do also introduce each day in the food quite as many grains of uric acid as they could hope to wash out, if the process did act as it is supposed to, by those who have trusted to their imagination and not looked to see what the physiology of the body really does.

If the pericardium is very strong and refuses to give way,

then the excess of fluid produces very high blood pressure with headache, mental depression, epistaxis, perhaps cerebral hemorrhage, but in any case the treatment is both painful and dangerous and I have shown that it is useless and unnecessary.

The opposite side of the picture is, I think, to be seen in the enormous amount of good which can be accomplished in many cases of collemia and Bright's disease by cutting off all fluids, by putting the patient on a pint, or even half a pint of fluid in the 24 hours, or even on an absolutely dry diet of bread and fruit, the small amount of fluid in the fresh fruit being all that is taken for days together. The way in which the heart will sometimes recover under these conditions, when not hopelessly damaged, and with the recovery of the heart the way in which the defective combustion which we call Bright's disease will gradually pass away, is an object lesson which many today should witness to show them how extremely silly and unphysiological is the opposite plan of treatment, the attempt to wash out the uric acid from the body in excess of fluid, when the uric acid, as a matter of fact, controls absolutely all output of fluid from the body, and the absolutely insane attempt to cure uric acid disease by sweeping it out with one hand, while pouring it in with the other. In this and all cases of uric acid disease there is no necessity to run such terrible risks, for the uric acid excretion can, in most cases, be reduced to at least one half by cutting off introduction, and if this is done it may be unnecessary to do anything at all to increase its excretion. A somewhat low and dry diet of bread and fruit with, or without, a little alkali, will do easily and safely all that is required.

ABSTRACTS.

Some Improvements in the Method of Local Analgesia.

ARTHUR E. J. BARKER, F. R. C. S., Eng., in a clinical lecture at University College, London, published in *The Lancet* for July 25, 1903, said among other things that several points must be borne in mind, among them the mechanical and physical difficulties in infiltrating all the nerves supplying an extensive field of operation. To inject the whole area so as to reach all its nerves would mean in many cases the use of much more of the toxic drug than is necessary, and in some cases so much as to be dangerous.

The author refers to certain observations by Braun, of Leipsic, on a method of overcoming the drawbacks incident to the usual mode of producing local anesthesia. This method is based upon

the old experience that anything which retards or diminishes the circulation of the blood in a part enhances the potency of the analgesic agent. Experiments were made with adrenalin, a very small quantity of which was injected with B-eucaine (or cocaine) into the author's own arm, and subsequently into the arms of numerous patients. After the lapse of twenty minutes the part was quite blanched and wholly insensitive to pain, remaining so for about two hours. Adrenalin, alone, used in this way had no analgesic effect, while the results of the use of the combined solutions of B-eucaine and adrenalin were far superior to those produced by B-eucaine alone.

The most convenient way to prepare the solution is as follows: powders each containing 0.2 gramme (3 grains) of B-eucaine and 0.8 gramme (12 grains) of pure sodium chloride are kept in thick glazed paper, ready for use. When needed one powder is dissolved in 100 c.c. ($3\frac{1}{2}$ fluid ounces) of boiling distilled water, and 1 c.c. of Parke, Davis & Co.'s solution adrenalin chloride is added when the fluid is cool. The solution is left in the Jena glass beaker in which it has been boiled, which is carefully covered and placed in a vessel of warm water to keep it at blood heat. The injection is made by means of a simple syringe of glass and metal of 10 c.c. capacity, with rubber washers, which can be sterilised by boiling.

To illustrate his method the author describes in detail the performance of an operation for the radical cure of inguinal hernia. The hernia is first reduced and the index finger is thrust into the external ring as far as possible. Along this finger the needle is entered and the inguinal canal is filled with 10 c.c. of the solution. An endeavor is made to inject it all around the neck of the sac so as to reach the genital branch of the genito-crural nerve. The needle is then entered at the external end of the line of incision in the skin, and is made to infiltrate the superficial layers of the latter down to the root of the scrotum, making the resulting wheal at least an inch longer at each end than the incision is to be. Injections are then made at a point half an inch to the inner side of the anterior superior spine of the ilium, the needle being thrust towards the ilioinguinal nerve, and at a point about one inch above the middle of Poupart's ligament where the iliohypogastric nerve is most conveniently met. Then the thigh is flexed and another syringe is injected along the ramus of the pubis and the root of the scrotum or labium.

It is necessary to wait twenty minutes after the last injection for the full effect of the adrenalin to develop. The whole field of operation should be blanched and insensitive to pricks but not to touch,—analgesia, not anesthesia. The incision may then be

made with confidence that no pain will be felt. The absence of oozing of blood is noticed. Only large vessels bleed at all.

Success depends upon a mastery of the principles, and practice in the details of the method. It is not enough to inject the fluid under the skin generally. Due regard must be had to the position and course of the nerves supplying the structures to be dealt with. The adrenalin compound, by slowing the circulation through the part prevents the anesthetic agent from being rapidly washed away. The writer has used this method in thirty operations including the radical cure of hernia, strangulated hernia, orchidectomy, removal of varicose veins, psoas abscess, loose body in knee, tumor of neck (actinomyces), colotomy, Thiersch skin grafting, and cystic adenoma of the thyroid.

On Empyroform, a Dry and Almost Odorless Tar Preparation.

DR. BRUNO SKLAREK, from Professor Neisser's Dermatological Clinic of Breslau University, (*Therapie der Gegenwart*, July, 1903,) says: practitioners are well aware of the fact that tar, besides its efficacy in psoriasis, the various forms of lichen and the pruriginous dermatoses in general, is the most valuable remedy that we possess for the treatment of eczema. Yet its proper employment is often a matter of difficulty, for the drug is hard to handle and may do harm as well as good.

Subsidiary but also important difficulties in the employment of tar are its black color and an odor which is very objectionable to many persons.

These considerations have for years led to persistent attempts to find a drug to take its place. My own efforts have been directed towards the employment of a condensation product of tar and formaldehyde, prepared by the Schering chemical factory of Berlin, and put upon the market under the name of empyroform.

My efforts were directed to ascertain the relationship of empyroform to tar in its therapeutic action, and to finding out whether it had similar properties to the older preparation or advantages over it.

Empyroform is a dry, non-hygroscopic, brownish powder, with a peculiar weak odor in no way resembling that of tar. It readily gives off formaldehyde when heated. It is insoluble in water, but dissolves in acetone and the caustic alkalies, and still more readily in chloroform. Its color and weak odor give it some *prima facie* advantages over tar. An empyroform-zinc paste is

grey, whilst a tar-zinc paste of equal strength is black. The absence of marked odor rendered the preparation especially acceptable to all the patients.

In powder form, either pure or mixed with zinc and amylum, empyroform was used almost exclusively in moist eczemas; and of course, like every other powder, only in conjunction with a salve-muslin, to prevent injury to the skin when renewing the application. We found the dressing very useful in these cases; but a mixture of the empyroform in a salve or a zinc paste was generally more convenient and efficacious.

In consequence of its desiccating properties empyroform is very useful in suspension, and can be added in varying amounts to the base mixture usually employed for that purpose (zinc, oxyd., talc. venet., glycerin., aq. dest., ana p.e.). It desiccates very rapidly, however, and should not be prescribed in too large amounts at one time. A good formula is the following:

R	Empyroform.....	15.0 (½ ounce.)
	Talc. venet.....	
	Glycerin	ana 10.0 (2½ drams)-
	Aq. dest.	20.0 (5 drams)-
	or instead of the last	
	Spirit. vini and aq. dest	ana 10.0 (2½ drams).
M	Paint.	To be well shaken before applying.

These suspensions have proved very valuable, the patients liking them better than the ointment. They are especially appropriate for individuals with an idiosyncrasy for fats. As with all similar applications, they are useful only when there is not much exudation present, either in the early erythematous stages of eczema, or later when desiccation and scaling have already set in.

The new remedy can be used in the form of tincture or varnish very advantageously; its color is dark then, but it is almost odorless. I found that a simple solution in chloroform in the proportion of 1 to 3 was too brittle and did not adhere sufficiently well to the skin. I therefore used the following tincture, which has not this disadvantage:

Empyroform.....	5.0-10.0 (1¼ drams to 2½ drams).
Chloroform.....	
Tinct. Benz.....	ana ad, 50.0 (1½ ounces).
M. Sig.	Paint.

Finally, one especial advantage of empyroform remains to be noted. It can render individuals who cannot stand tar at all, capable of using the drug. The ideal eczema treatment is the tar treatment. It is a very great advantage to have a remedy in empyroform to help us even in cases that are most recalcitrant

and susceptible to the tar. I have used it repeatedly in cases of the kind and have only good results to report. Patients who could not stand tar in any form, in whom its most cautious application caused irritation and new attacks of the eczematous disease, have become so accustomed to the drug through the empyroform treatment that they were finally not only able to use a weak tar-zinc paste, but even stood the tar tincture without any trouble, and so were finally led to a definite cure.

The advantages of the new drug are probably due to the combination of formaldehyde with the tar. To recapitulate them, the first are its great antipruritic and desiccating qualities. Then it causes neither local reaction nor systemic intoxication. Further, with its help patients can be gradually accustomed to the use of tar. It is almost entirely odorless. The lesser intensity of its color is a property whose value must not be underestimated; it is a more cleanly dressing, and does not soil the body and bed linen as tar does. All these things give it the right of introduction into the field of dermatotherapy.

IMPORTANCE OF LEUCOCYTOSIS IN GYNECOLOGY.

WEISS reviews 23 illustrative cases taken from Chrobak's clinic in Vienna, and from these concludes that the determination of the number of leukocytes forms in gynecology a substantial aid in differential diagnosis, in that constant leukocytosis with a number above 16,000 shows the presence of a suppurative process. If the process is of some duration, the number generally diminishes although noticeably high when medical advice was first sought. In cases of long standing, leukocytosis fails under any circumstances, and the physician in these cases must direct his treatment according to general principles determined by the general subjective condition of the patient and the objective condition of the genital tract. A negative condition of leukocytes in an acute illness or illness of short duration entirely excludes any suppurative process.—*Weiner Klinische Wochenschrift*.—*American Medicine*.

POISONING FROM PENNYROYAL.

HOLLAND, (*Virginia Medical Semi-monthly*, October 24, 1902), reports a case occurring in a woman, who upon advice of a physician took oil of pennyroyal as an abortifacient. Seven drops were twice taken in the course of three hours, and three hours later a half teaspoonful. The woman went to bed and to sleep, awakening in about an hour complaining of nausea and dizziness.

She vomited and almost immediately was seized with a violent convulsion. The spasm lasted only a few minutes and left the patient tossing about and talking incoherently. Consciousness was regained in about half an hour. There was great weakness, a rapid, feeble pulse, cramps in the stomach and a slight desire to go to stool. Recovery was complete, but the flow did not come on.

ABSENCE OF THE APPENDIX VERMIFORMIS.

MICHAUX, (*Virginia Medical Semi-monthly*, Sept. 12, 1902), reports two cases in which the diagnosis of appendicitis had been made where operation showed no appendix to exist. In one a perinephritic abscess was found under the colon and behind the peritoneum. In the second case the right ovary was cystic.

NEURASTHENIA IN CHILDREN.

DR. J. M. TAYLOR says the acquired form of neurasthenia, so common in adults, secondary to a large variety of exhausting conditions, is rare in children, but occurs with sufficient frequency to warrant attention. There are also many cases of feebleness or frailty, which, in essence, are instances of "nerve tire" and are the product of injudicious or unfortunate environment or upbringing so closely allied to hereditary causes that they cannot well be separated. Many of these cases will continue through life; a much larger number of them are capable of most satisfactory improvement. The manifestations of neurasthenia in children are obvious enough, if rightly interpreted. They may take the form of undue fondness for one pursuit, such as reading, or a hypersensitiveness to external impressions, or an overstrenuousness in play or work, a hypertension, or in other instances which are to be carefully discriminated from the last class, a hypotension.

The treatment of this condition requires the utmost care to all details of air, diet, exercise, etc. A modified form of rest cure is given in detail.—*Post-Graduate*.

RHEUMATIC DYSMENORRHEA.

R	Tr. cimicifugæ	2 ozs.
	Tr. stramonii	½ oz.
	Tongaline, q. s. ad.....	4 ozs.

M. Sig.—A teaspoonful in water at meal times.

BUFFALO MEDICAL JOURNAL.

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The Law and Infectious Disease.

PROPHYLAXIS in medicine is surely growing more in favor with both laity and profession, and even by the courts, who look upon the dissemination of disease, knowingly and willingly by the afflicted as a misdemeanor, punishable by fine and imprisonment.

During the past few months several announcements have been made in the press of such action by the courts relative to the propagation of venereal diseases, as the two following items will show:

The Munich courts have condemned to five months' imprisonment a post-office employee who had established intimate intercourse with a chambermaid of good character ("ein unbescholtenes Zimmermadchen"), although he knew that he was suffering from an uncured venereal disease.

In its column on medical jurisprudence the *Journal de Paris* narrates the following:

It is interesting to give, *in extenso*, the text of a judgment rendered by the tribunal of the Seine, on January 29, 1903. It relates to the transmission of syphilis to a young girl under age of consent, and civil damage as a consequence.

It is established by correspondence, and notably by a letter that is to be attached to this judgment, the aforesaid letter being written by X, the 21st of July, 1901, besides other grave charges, that are authentic and agreed on, that (1) in the earlier months of the year 1901, X was attacked by syphilis; (2) that he had at the same time, from the month of February to the month of July, 1901, sexual relations with a young girl that was under age; (3) that this girl, in due time, was attacked by syphilis in the month of June, 1901.

Agreed, under these circumstances, it is sufficiently well established that X has given the young girl his contagious malady knowingly, etc.

The verdict goes on to give the good and valid reasons of the court for granting the wronged girl damages, and the conclusion of the decision says, for the reasons enumerated, X is condemned to pay the plaintiff, 12,000 francs (\$2,400) damages, and all the expenses of the trial.

It is interesting to note that both of these cases occurred in centers noted for their lack of moral cleanliness, and it is all the more gratifying to know that in these very centers the wronged have some recourse to justice, even if not to public opinion.

Civil suits for damages occupy the greater attention of our over busy courts, and in the majority of cases as the result of slight accident, functional nervous disturbances only ensue. No permanent lesion follows, the case is stubbornly fought and the award acts as a most powerful tonic, insuring an early convalescence.

How different is it with the infection of a venereal disease. At best it is a question of months, even years before perfect health is regained, and that at a great financial and physical loss. If liability is conceded in the one case, why not in the other where manifold more injury is inflicted? The Paris and Munich courts of tribunal need imitators throughout the entire civilised world.

Again the Water Supply.

AT the last meeting of the Buffalo Academy of Medicine, Dr. George E. Fell read a paper, entitled Lake and river current observations and their value to our city. Dr. Fell's conclusions were as follows:

1. Beginning at Smokes Creek,—that the lake currents follow the shore closely and pass to the United States Harbor at the first opening between the breakwaters.

2. That the lake waters, for at least one mile, out in the lake at Smokes Creek, also pass into this southerly opening. This conclusively proves that material from Smokes Creek can not pass north of first opening of breakwater.

3. That material as far out in the lake as one thousand feet from the breakwater at middle opening also passes inside or through the middle opening between breakwaters.

Also that material one thousand feet out in the lake from the red light, north end of old breakwater, passes down the river a distance of about three hundred and twenty feet easterly of our intake.

5. That material one hundred feet westerly of this red light instead of passing north of the new breakwater actually passes with a strong flow to the south of it.

6. That this last indicated current prevents any material from Smokes Creek which has reached any points inside of or to the easterly of breakwater from going to the westerly of Bird Island Pier in any quantity, if at all, and, also, the outflow of Buffalo River from passing out into the current of Niagara River as far as it did before the new breakwater was constructed, whereas it was generally believed that it produced an opposite effect.

7. It teaches us that the great mass of polluted waters from Buffalo River and Smokes Creek district, our own littoral pollution passes down the Erie Canal, instead of out or into Niagara River, except as leakage through Bird Island Pier.

8. It has settled unquestionably this fact, that the conditions existing at Buffalo are different in toto from those existing at Cleveland, Milwaukee and Chicago, and proven in the most positive manner that the location of our present intake is such that it can not be influenced detrimentally to the character of our general lake supply by local currents, or that the water at our intake is as pure as the water in the immediate center of the lake.

9. It has eliminated from the controversial probability any necessity for the construction of an enormously expensive system of filtration plants.

10. It has narrowed the question of impure water supply down to the question of possible seepage or the question of import or sedimentary disturbance from the silt at the bottom of the lake.

11. It has annihilated (I trust for good) the very general impression so extensively published to the detriment of our city that Buffalo was in great danger from its water supply; that a terrible epidemic could only be averted by boiling our water.

12. It has provided valuable data which will be of constant value in many questions arising in the future as to our water supply.

13. It has demonstrated that we are receiving water at our intake from points much farther out in the lake or even from a more satisfactory location than the water supplied to the Western New York Water Company, off Woodlawn Beach, the water of which is according to clinical observations and the investigations of Mr. George W. Fuller, now investigating our water supply, and Dr. William T. Sedgwick, of Boston, as good as any water supplied to any city in the country.

We give our readers Dr. Fell's conclusions as to the integrity of Buffalo's water supply for various reasons. The conclusions are the mature thought of a physician who has had extended experi-

ence as an engineer connected with the government works in and about our harbor. They represent the results of careful and prolonged study of the question of the purity of our water supply. They were delivered at a formal meeting of the Buffalo Academy of Medicine, and therefore in a degree carry the approval and endorsement of that distinguished body. They have appeared in the column of one of our more influential daily papers. They have received the emphatic editorial endorsement of that paper, the *Buffalo Commercial*, and they may easily be made the cause or reason for official action or inaction on the part of our Board of Health. And furthermore, we believe these same conclusions to be greatly in need of editing.

We assume at once the cordial support of our readers to the well-known proposition, that the question of our water supply is of the first importance and that the responsibility of the medical profession to guide, to teach and to inspire the public mind to right thinking, and efficient action in this regard is the chief duty of that profession. We are quite in accord with Dr. Fell, that there should be no panic as to our water supply, but we also cannot forget that for years we have had the significant fact of a mortality from typhoid fever of more than seven times that of many of the great cities of Europe, cities in which the hygienic conditions are equal to or superior to ours only in the single item of a pure water supply.

The public and those in authority must be convinced that no single fact bearing upon this question has had and will continue to have the importance of this item of clinical demonstration, of conclusive proof that the water supply of our city is contaminated with the infection of typhoid fever; proof from month to month, from year to year of the degree of the fatal activity of that infection.

The chief aim of Dr. Fell's conclusions seems to be to show the harmlessness of the water of Smokes Creek to our water supply, even assuming that water to be well loaded with the typhoid infection.

Our criticism is that his observations do not justify his conclusions, and that his conclusions are liable to be misleading and therefore dangerous, not only as to the lesser question of the possible infection of our water supply from the water of Smokes Creek, but more particularly, dangerous as to the greater question the degree of infection our water supply is receiving from the shores and bottom of Lake Erie. It is a well-known fact that the typhoid infection lives in certain soils almost indefinitely, and the inference seems safe that the mud and slime and sand of our harbor's bottom and of many spots on the near-by shores of

Lake Erie are either frequently or constantly the breeding ground of this infection and consequently a persistent menace to the health and lives of our citizens through our water supply. The frequently recurring phenomena of wind storms producing the condition of our city water, known as sand roil, must admonish the thoughtful that the shores and bottom of Lake Erie are liable to have too much influence upon the purity of our water supply, and possibly a direct causative influence upon our discredibly high typhoid morbidity and mortality.

Commercialism and Charity.

THE newspapers are passing along a semi-humorous paragraph to the effect that a Pennsylvania physician has burned up as worthless \$12,000 worth of accounts. The comments on this tale, true or otherwise, are various, and while there is an evident intent to make humor of it there is underlying a serious strain which amounts almost to pathos. The *Buffalo Express* in referring to the matter said that physicians were the only class of men in business who would permit that amount of accounts to stand long enough on their books to become "no good." That appears to be the keynote of all newspaper comment. Physicians are notably lax in business methods and suffer thereby.

Time and custom have made it a joke among those outside the profession that a doctor is always the last to be paid; and yet it speaks well for the profession that there are so few judgments entered against physicians in the courts of law for nonpayment of debt. The public knows nothing of the worries of professional life, of the struggle to collect accounts, the constant hammering of delinquents and the constant and callous evasion on the part of the once grateful debtor.

From a purely commercial standpoint, the average physician is a poor business man. The grocer, the butcher and the candlestick maker, when their bills are not paid promptly, cut off supplies to the delinquent family until they pay. If they don't liquidate the debt they must go somewhere else to trade. It lasts just long enough for the new dealer to learn through the commercial exchange system, which is in vogue in almost every branch of purely commercial business nowadays, that the new customer is a delinquent, and he is then asked to pay as he goes. On the other hand, if a physician does muster up sufficient courage to refuse his services to a family which may properly be classed under the "dead beat" list, another member of the profession will attend that family and continue to give them his time, his

skill and his best endeavor without in the least attempting to find out if they are good for his bill when he presents it. He has no means of knowing whether the family is good pay, bad pay or no pay at all, because there is no system. Professional jealousy may account for this; perhaps something else may, but the condition exists nevertheless, and physicians will continue to carry a mass of wholly worthless accounts on their books until they make some effort to regulate the evil.

Nearly every city of any size employs district physicians whose work it is to care for the poor unable to pay for medical attendance. Where the poverty is so acute as to demand it, the city pays for the necessary medicines. Municipalities supply or pay for antitoxin and vaccine, and the careless physician gives his time to the administering of the drugs.

It is well and eminently proper that we should as a profession practise charity and relieve distress, heal the sick and comfort the afflicted; but it is not right that we should give away our best efforts to an unappreciative class of patients who do not pay, although they are able to, and who will not pay, although they can. Various suggestions have been made looking to a regulation of the evil of free services, but as yet none seems to have been advanced which is practical.

The little half-humorous paragraph which is going the rounds of the newspapers might furnish food for serious discussion at the meetings of county societies.

WALTER REED MEMORIAL FUND.—On the 15th of August a meeting was held in Bar Harbor of friends of the late Major Reed, M. D., U. S. A., to whom in a large degree is due the discovery of the mode by which yellow fever has been spread and the consequent suppression of that dire disease. Representative men were present from distant parts of the country and letters were received from various members of committees already appointed to promote the collection of a memorial fund in grateful commemoration of Dr. Reed's services. Important suggestions were presented from President Eliot, Dr. W. W. Keen, Professor J. W. Mallet and others. Dr. Daniel C. Gilman, chairman of a committee appointed by the American Association for the Advancement of Science, presided, and Dr. Stuart Paton acted as secretary. Among those who took part in the conference were Dr. W. H. Welch, of Baltimore; Dr. Janeway, of New York; Dr. Abbott, of Philadelphia; Dr. Herter, of New York; Dr. Barker, of Chicago; Dr. Sajous, of Philadelphia; Dr. Putnam, of Buffalo, and Dr. Fremont Smith, of Bar Harbor; and also Bishop Law-

rence, of Massachusetts, and Messrs. Morris K. Jesup, president of the New York Chamber of Commerce; John S. Kennedy, president of the Presbyterian Hospital of New York, and William J. Schieffelin, of New York.

The following conclusions were reached: that an effort should be made to raise a memorial fund of \$25,000 or more, the income to be given to the widow and daughter of Dr. Reed, and after their decease the principal to be appropriated either to the promotion of researches in Dr. Reed's special field, or to the erection of a memorial in his honor at Washington.

Arrangements were made for the publication of circulars explaining this movement, and asking coöperation not only from the medical profession, but from all liberally disposed individuals who appreciate the value of Dr. Reed's services to mankind.

THE agitation toward a suppression of the toy pistol evil is becoming widespread and Buffalo has entered the lists and taken a firm stand against this apparently innocent and patriotic toy. It is the intention to not alone stop the sale of the blank cartridge pistol, but to prevent its use at any time. This is the only safe course. So long as there is a pistol available, the fearless and irrepressible small boy will get it; and if he cannot discharge it in the street he will go somewhere where he can. The small boy is naturally brave, but bravest when he is eating forbidden fruit. The long and constantly growing mortality list due to tetanus directly traceable to the use of the toy pistol has at last attracted the attention of the ordinarily complacent municipal legislators, and they are beginning to see that there is something in what the medical profession has been crying against for years, and they are taking action against it. It was the same way with diphtheria and the use of antitoxin. In some cities the suggestion to provide free antitoxin was granted readily enough, not because it was for the good of humanity alone, but because some of the able and far-seeing politicians saw "something in it." They saw the Mecca of all political life—graft! In other places where the possibilities were not seen or where they were unattainable, the plan was shelved until the matter was brought home to the objectors possibly by a death in their own families from the disease. Then with almost feverish haste was the plan adopted. There is no graft in the toy pistol trade; at least none for municipal politicians, and so the advice of science is listened to and followed. The wiping out of the toy pistol will save many lives and it is a gratification that Buffalo is taking such active and rigorous steps to prevent even the innocent possession of the dangerous article.

THE third fascicle of contributions from the William Pepper laboratory of clinical medicine has been sent out within the last few weeks. It contains a group of papers reprinted from various magazines, bound in paper and issued in quarto form. A large portion of the book is devoted to the pathology of diseases of the nervous system by Spiller, Frazier, McCarthy and Ravenel. Other contributions relate to pancreatic disease, creatinin secretion, diabetes mellitus, urinary specific gravity and nitrogen elimination in pregnancy, postoperative changes in the blood, myositis fibrosa, granular degeneration of the erythrocyte, sarcoma of the large intestine, carcinoma of the eyelids, papilloma of the caruncle, and the surgical treatment of sterility, due to obstruction at the epididymis. It is a valuable brochure, but its convenience of reference would have been enhanced very much if it were paged consecutively and indexed.

IT HAS remained for an enterprising British insurance corporation to take the lead in bizarre risks and steal a march on the boasted enterprise of the Yankee. The Royal Exchange Assurance Company, of England, has sent out a prospectus, offering to insure against appendicitis at the rate of \$1.25 a year per each \$500 of insurance. The policy guarantees the holder against medical, surgical and nursing expenses up to the amount insured for. *The Lancet* has taken the matter up and in a tone which, when one considers the usually serious import of *Lancet* utterances, might be said to be almost flippant in tone, the famous medical journal wonders how the applicant can answer the question: "Have you or your family ever suffered from appendicitis, or from any of the symptoms pertaining to it?" *American Medicine* has a say, too, in a recent issue and thus cleverly handles the subject:

What is meant by "family," and is a pain in the belly a symptom of this disease only? Moreover, has the patient the requisite medical knowledge either of himself or his family to give a discriminating answer? The Insurance Company's leaflet says that during 1900, 15,000 operations were performed in the United Kingdom for appendicitis. Were there so many in the whole world? The company estimates that about one in 400 per annum will be attacked by the disease. But would the rate be the same in the United States with its appendiceal beliefs as in conservative England? And then how about all the other ailments and accidents which may happen to one? There are a thousand ways in which one may be sick or die: should the prudent man not secure a policy for each one of them? This would in time result in a distinct form of monomania, a morbobophobia which might

be called insurance disease. Could the companies devise a policy for these afflicted ones?

THE osteopaths are beginning to sit up and notice one another in the columns of their official organs and what has been looked for is come to pass. They are beginning to find fault with one another as to the ethics of their "profession," and are drawing fine lines of distinction as between "regular" osteopaths and "lesion" osteopaths, whatever those terms may mean to the practitioners of massage.

The heretics believe there are other agencies than manipulation which will cure disease conditions and so the squabble has begun. In discussing the matter a "Dr. C. W. Young, D. O." says, referring to "Dr." Still's textbook on osteopathy, and be it remembered that "Dr." Still is the inventor of this method of massage:

Chapter XIV. is devoted to the treatment of diphtheria and other diseases by pouring glycerine and water in the ear. He described a desperate case of croup, where water, glycerine and a wet rag were used and "osteopathic treatment." I have heard the book ridiculed for this chapter. I do not believe in ridiculing anything until you know what you are talking about. I tried this ear treatment in the case of the surgically maimed child who died while under my treatment of diphtheria. It seemed to give relief and she begged to have it repeated. She seemed to be improving at the time she choked to death when the nurse attempted to force her to swallow too much water all at once. I am satisfied that this ear treatment is all right as well as all other treatments described by Dr. Still. Too many osteopaths are neglecting to read the Old Doctor's books. He says God and experience are his authorities. I believe in these authorities. They are far ahead of the authority of theory.

Which is chiefly interesting because it is so foolish.

THE state board of examiners of registered nurses, composed of L. Bissell Sandford, of New York; Miss Annie Damer, of Buffalo; Miss Dorothy N. McDonald, of Brooklyn; Miss Sophia F. Palmer, of Rochester, and Miss Jane Elizabeth Hitchcock, of New York, held a meeting September 15, 1903, and elected Miss Palmer, president, and Miss Hitchcock, secretary. Miss Palmer is editor of the *American Journal of Nursing*. Miss Hitchcock has charge of the nursing staff in the nurses' settlement, New York.

The test in practical nursing to be applied by the state board will include both a practical demonstration and a written test.

The practical demonstration will be conducted by a member of the board of examiners who must recommend the applicant for admission to the written test. Both practical demonstrations and written tests will be held on the dates and at the places prescribed for regents' examinations in the other professions.

GYNECOLOGY as a specialty is a goner. Russell Bellamy says so over his printed signature. Lest there be some unenlightened person that may inquire,—“And pray, who is Russell Bellamy”?—we remark that he is the associate editor of the *Medical Critic*, in charge of the department of gynecology. So, that appears to settle it; hence, we expect R. B. will seek other employment.

YELLOW fever is epidemic at Tampico and the health authorities are endeavoring to stamp out the disease. Over 200 residences which had been inhabited by yellow fever patients have been burned. Fire is naturally the best disinfectant, but such wholesale conflagration partakes more of the nature of pyromania than of science.

TEXAS, with past experiences with yellowjack in mind is taking precautionary measures against the epidemic which is raging in Mexico, by establishing fumigating plants along the Rio Grande, and the state health department has sent Dr. I. P. Seison to Monterey to watch the progress of the disease. In Mexican districts along the border, especially in Linares, panic prevails, and in the latter place, the population of which was 9,000, there are eight deaths a day. Half of the population has either died or fled.

American Medicine calls attention to what it terms a negro population paradox. Official figures are quoted to show that while the negro death-rate in cities exceeds the birth-rate, the negro population in the rural districts is increasing very rapidly; so rapidly in fact as to more than offset the decline in the cities. And bulking the negro population the official census figures show that there has been an increase of over 1,000,000 in each decade.

PERSONAL.

DR. WALTER B. DORSETT, of Saint Louis, announce the removal of his office, October 1, 1903, to the Linmar Building, (suite 26), southeast corner Washington and Vandeventer avenues. Hours:

1 to 4 p.m., 7 to 8 p.m., by appointment only. Both telephones at residence, 5070 Washington avenue. Office telephones: Linmar Building, Lin. 231, Kin. C 1363.

DR. A. L. BENEDICT, of Buffalo, attended the meeting of the Canadian Medical Association at London, Ont., August 26, 1903, as delegate from the Medical Society of the State of New York. He also read a paper entitled, Multiple visceral lesion, at the annual meeting of the Erie County Medical Society, held at Erie, Pa., September 1, 1903.

DR. WILLIAM A. WHITE, formerly assistant superintendent of the State Hospital for the Insane at Binghamton, N. Y., has been appointed by the Secretary of the Interior, Superintendent of the Government Hospital for the Insane at Washington, D. C., vice A. B. Richardson, deceased.

DR. EUGENE A. SMITH, of Buffalo, who was ill for some weeks last spring, spent the summer in much needed rest, and resumed his professional work about September 1, 1903, much to the gratification of his colleagues and other numerous friends.

DR. MONTGOMERY A. CROCKETT, of Buffalo, who has been studying general surgery in Europe during the summer, has returned and resumed his professional work.

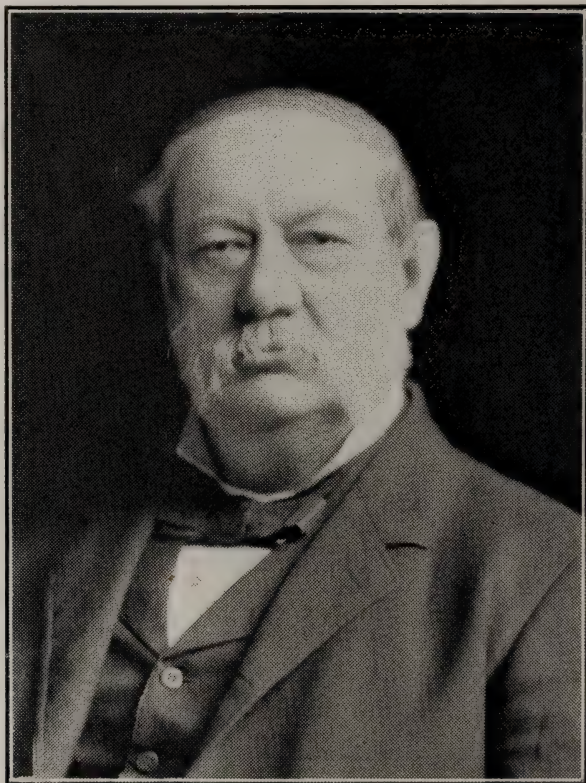
DR. W. S. BAINBRIDGE, of New York, delivered a series of lectures on medical history at Chautauqua during the last summer season.

DR. and MRS. J. V. WOODRUFF, of South Buffalo, are making a two months' tour of the Bermudas.

DR. IRVING M. SNOW, of Buffalo, has returned after a few weeks of rest and recreation in Europe.

OBITUARY.

DR. WILLIAM CARY BARRETT, D.D.S., dean of the dental department of the University of Buffalo, died at Nauheim, in Germany, on August 22, 1903, aged 70 years.



WILLIAM CARY BARRETT; M. D.

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Dr. Barrett was born in Monroe County, N. Y. He received his preliminary education at Kingsville Academy, Ohio, Carey Academy and Yates Academy, in that state, and for some years taught in various places. In 1864 he began the study of dentistry and took the degree of master of dental surgery in 1869. He practised in Warsaw until 1876, when he came to Buffalo. In 1880 he received the degree of M. D. from the University of Buf-

falo. The next year he gained the title of doctor of dental surgery from Pennsylvania.

Dr. Barrett, in 1885, began lecturing at the University of Buffalo, and in 1890 became professor of oral pathology. About the same time he was appointed to a professorship in the Chicago College of Dental Surgery of the Lake Forest University. Dr. Barrett retained his residence in Buffalo, however, and went to Chicago at stated intervals, to deliver his lectures and give the instruction belonging to his chair.

Upon the organisation of the dental department of the University of Buffalo in 1891, Dr. Barrett was elected dean of the faculty, and also held the professorship before referred to. He was also oral surgeon on the staff of the Buffalo General Hospital.

For some years Dr. Barrett edited the *Dental Practitioner*, and was the author of several monographs upon subjects connected with dental medicine.

Dr. Barrett was a member of the Erie County Medical Association, and of the American Medical Association. He was a member of the International Medical Congress (London, 1881); an honorary vice-president of the ninth congress (Washington, 1887); and of the tenth congress (Berlin, 1890). He was president of the State Dental Association in 1875 and 1876, and of the American Dental Association in 1886. He was an honorary member of many state, national and foreign professional societies.

Dr. Barrett had traveled much and studied in many hospitals. His pathological collection is very valuable.

Dr. Barrett was married in 1857 to Amelia Harris Ryerse, of Port Ryerse, Ont., who survives him. Mrs. Barrett was with her husband abroad and brought his remains home for interment. The faculty and alumni of the dental department of the University of Buffalo took appropriate action upon the receipt of the news of Dr. Barrett's death.

DR. JAMES FARQUHAR HIBBERD, of Richmond, Ind., died at his home in that city, September 8, 1903, aged 86 years. He was born at Monrovia, Md., and received his academic education at Alexandria, Va. He attended medical lectures at Yale University and received his degree at the College of Physicians and Surgeons, New York, in 1849. He practised his profession for a few years in California, removing to Richmond in 1856. He was professor of physiology and general pathology in the Ohio Medical College, Cincinnati, during the sessions of 1860 and 1861.

Dr. Hibberd was one of the founders of the Ohio State Medical Society, one of the chief organisers of the Indiana State

Medical Society, and served a term as the first vice-president of the American Medical Association in 1865; later its president in 1894. He was a member of many other local and national medical societies, in most of which he held official positions. He served for a time in the union army during the Civil War, was in the Ohio legislature for three terms, and from 1875 to 1877 was mayor of Richmond.

DR. ROBERT A. PATCHEN, of Des Moines, Ia., a graduate of the University of Buffalo, 1869, died at his home August 31, 1903, aged 53 years. Dr. Patchen occupied a prominent position as a physician and citizen in the city where he lived. He had been president of Polk County Medical Society, was a member of the Iowa State Medical Society, State Association of Railway Surgeons, and of the International Association of Railway Surgeons. The cause of his death, as reported, was an acute exacerbation of disease of the liver,—a malady that had afflicted him for a number of years.

DR. JOHN B. LUNDY, of Preston, Ont., a graduate of the University of Buffalo, 1851, died of paralysis, at his home, August 20, 1903, aged 77 years.

SOCIETY MEETINGS.

THE American Public Health Association, representing the United States, Canada, Mexico and Cuba, will hold its thirty-first annual meeting at Washington, D. C., Monday, Tuesday, Wednesday, Thursday and Friday, October 26, 27, 28, 29 and 30, 1903, under the presidency of Dr. Walter Wyman, surgeon general of the United States Marine Hospital and Public Health Service, of Washington.

The executive committee has selected the following topics for consideration, but papers will be received upon other sanitary subjects: purification of water supplies; disposal of industrial wastes; purification and disposal of sewage; disposal of garbage; animal diseases and animal food; car sanitation; steamboat and steamship sanitation; etiology of yellow fever; tuberculosis; plague; demography and statistics in their sanitary relation; cause and prevention of infectious diseases; infectious period of communicable diseases; public health legislation; cause and prevention of infant mortality; disinfectants and disinfection; production and free distribution of vaccine; teaching of hygiene

and granting of diploma of doctor of public health; sanitary aid societies; canteen in armies.

THE Buffalo Academy of Medicine held meetings during the month of September, 1903, as follows:

Section on Medicine.—Tuesday, September 15. Program: Lake and river current observations, and their value to our city, George E. Fell; The Hamburg filter plant and filtration of water in Holland, A. L. Benedict. Discussion: Drs. Henry R. Hopkins, Walter D. Greene and Wm. G. Bissell.

Section on Obstetrics and Gynecology.—Tuesday, September 22. Program: Some practical points in the management of ordinary labor, Peter W. Van Peyma. Discussion: Drs. Ludwig Schroeter and Stephen Y. Howell.

THE Medical Society of the State of New York, will hold an autumn meeting at the New York Academy of Medicine, 17 West 43d Street, New York City, Tuesday and Wednesday, October 13 and 14, 1903, under the presidency of Dr. A. T. Bristow, Brooklyn. The members of the medical profession are cordially invited to attend.

THE Medical Association of Central New York, held its 36th annual meeting at Auburn, N. Y., September 22, 1903, under the presidency of Dr. John L. Heffron, of Syracuse. The officers elected for the ensuing year are: president, Dr. Charles A. Van der Beek, Rochester; first vice-president, Dr. Charles G. Stockton, Buffalo; second vice-president, Dr. H. H. Brown, Auburn; secretary, Dr. C. A. Greenleaf, Rochester; treasurer, Dr. William M. Brown, Rochester. The papers read at the meeting will be printed in this JOURNAL.

COLLEGE NOTE.

THE directors of the Memphis Medical College have established a lectureship, named in memory of the late William E. Rogers, M. D., founder of that institution.

The lectureship was established upon the suggestion of the faculty. Once during each session a lecture will be given by a specialist in some branch of medical science, at the invitation of the faculty.

The first lecture will be given about the middle of November, 1903, by Dr. Charles H. Hughes, of Saint Louis. Dr. Hughes is a professor in the medical department of Washington University.

BOOK REVIEWS.

THE DIAGNOSIS OF DISEASES OF WOMEN. A Treatise for Students and Practitioners. By Palmer Findley, M. D., Instructor in Obstetrics and Gynecology in Rush Medical College, in affiliation with the University of Chicago. In one octavo volume of 494 pages, illustrated with 210 engravings and 45 full-page plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1903. (Cloth, \$4.50 net; leather, \$5.50.)

This treatise will be found of great use to the student of pathology, whether he be undergraduate or practitioner. In this it follows the lines of the German books that deal so extensively with morbid anatomy. Many of our gynecological treatises, excellent though they be, are somewhat deficient in this respect. Findley's work will supplement them most admirably.

The author has not failed to give due attention to the clinical aspects of his subject, which is a desideratum for both the student and practitioner, to whom the book is particularly commended, these composing the audience for which it was written. Whoever labors under the delusion that gynecology as a specialty is passing, should read the book with care. Every page bristles with the importance of special knowledge for the conduct of the diseases of women. Those who would succeed must be familiar with the use of the microscope, for many affections cannot be given their appropriate place without the aid of high-power lenses.

The illustrations deserve a word of praise, many of which are microscopic sections of diseased conditions observed by the author or others, and all of which are helpful to a better understanding of the text. If another work is to be added to the already massive literature of gynecology it is well that it is constructed on the lines laid out by Findley. He will be sure of a numerous and attentive audience that cannot fail to be instructed as well as interested by what he has written.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES BY VARIOUS WRITERS. New edition. Edited by ALBERT H. BUCK, M. D. Volume VI. Imp. Quarto. 1012 pages. 764 engravings. Nine full-page plates, in black and colors. New York: William Wood & Company. 1903.

Whoever is sceptical as to the usefulness of such a series as is being issued under the title of Reference Handbook of the Medical Sciences, should examine with care the sixth volume which is recently from the press. It contains over a thousand pages of important, interesting, and instructive scientific material, by authors of acknowledged ability, the great majority of whom are entitled to speak *ex cathedra* on the subjects of which they write.

We may not be invidious where all is of so much value, yet we would invite special attention to the article by Professor Vander Veer, of Albany, on retroperitoneal tumors, which is a succinct setting forth of our present knowledge on this class of new

growths. It exhibits a clear understanding of the pathology, histology, and treatment of these neoplasms,—there being but one life-saving method of the latter, and that surgical. Dr. Vander Veer's article in a former volume on cleft palate, was a masterful handling of a technical subject, characterised by the same skilful knowledge as marks the present monograph. We may mention, however, the articles on muscles, by Prof. Simon H. Gage, Lydia M. Dewitt and Francis J. Shephard; on nasal cavities, by Robert C. Myles; on parasites, by Henry B. Ward; on the nervous system, by Pearce Bailey, James J. Putnam, Wm. M. Leszynsky and Lewellys F. Barker; on ophthalmological topics, by John Green and Beaumont Small; on ovariectomy, by Hunter Robb; on the ovum, by Robert P. Bigelow; on the pelvis, by Frank Baker; on the pharynx, by Seth Scott Bishop; on pleurisy, by Frank W. Jackson; on pneumonia, by Andrew H. Smith; on poisonous plants, by Henry H. Bushby; on poisonous reptiles, by Gustav Langmann; on poisons, by Charles Harrington and R. H. C. Chittenden; on the prostate, by Arthur T. and Hugh Cabot; on ptomaines, by Rudolph A. Witthaus; on the pulse, by Wm. S. Morrow; on reflexes, by Joseph Fränkel; on reparative surgery, by Joseph Ransohoff; on resection of joints, by Frank Hartley, and on the Röntgen rays, by Wm. C. Borden. This volume contains 764 engravings and nine insert plates in black and colors.

TUBERCULOSIS. Recast from Lectures Delivered at Rush Medical College, Chicago. By NORMAN BRIDGE, A. M., M. D., Emeritus Professor of Medicine in Rush Medical College. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$1.50 net.)

The disease of which this modest volume treats has become the scourge of the human race, at least of the white portion of it, for, as declared by this author, tuberculosis in one form or another, is responsible for the destruction of one-ninth of all the white races. Surely, such destructiveness of life is worthy the name of scourge; and again, quite as surely it is worthy the best efforts of the medical profession to check, if not arrest its spread through channels of infection.

Since Koch, about 20 years ago, pointed out its microbic origin, activity has been manifest all over the civilised world in the direction of preventing or controlling the spread of tuberculous disease, but the people are slow to adopt even the simplest measures of prevention recommended by sanitarians. If all educated persons, not physicians, could read this book, it would prove a mighty aid to the cause of prevention. Bridge has made a contribution to the study of tuberculosis in this work, and it deserves a wide-spread circulation. It is by far the most practical monograph on the subject that has yet appeared, and belongs on the book-table of every person interested in the prevention or cure of the disease with which it deals.

LEA'S SERIES OF POCKET TEXTBOOKS. A Manual of Bacteriology for Students and Physicians. By FRED C. ZAPFFE, M. D., Professor of Pathology and Bacteriology in the Illinois Medical College; Professor of Histology in the Department of Medicine and in the School of Dentistry of the University of Illinois, Chicago. Duodecimo, 350 pages, with 150 engravings and 7 full-page colored plates. Series edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, cloth, \$1.50 net; flexible leather, \$2.00 net.)

In order to acquire a knowledge of bacteriology,—a working clinical knowledge even,—the laboratory must be resorted to and that under an experienced instructor. But one must also have books which likewise have been prepared by a competent teacher of bacteriology. This book is just such an one; it is succinct in expression, compact in form, practical in character, and handsome in make-up. It begins at the foundation of the subject upon which it constructs a superstructure that includes the whole fabric of the science. It is distinctly a book for the student and practitioner, for the beginner and for the clinician. It is set with engravings all through the text that are gems, many of them of the first water, and which contribute vastly to a completer understanding of the author's meaning. It is by and large a most satisfactory manual, and will not disappoint the purchaser.

A TEXTBOOK OF MINOR SURGERY, INCLUDING BANDAGING. By NEWMAN T. B. NOBLES, M. D., Professor of Surgery at the Cleveland Homeopathic Medical College. 325 pages. Boericke & Tafel, Philadelphia. 1903. (Cloth, \$2.50; postage, 15 cents).

If another work were needed on the subjects embraced by the above title perhaps this book might be regarded as filling a place; but it is difficult to appreciate any such necessity in view of the excellent manuals of Wharton and others. Moreover, this "text-book" does not deserve such a name, nor does it rise to the standard already set by similar treatises now in the field. In the bandaging part it is decidedly weak, incomplete, and altogether unsatisfactory. Nevertheless, in spite of its defects, the book contains much that is useful to the novice and may serve its purpose to the audience for which it is intended. How in the world any surgeon today, no matter in what "school" of medicine taught, could recommend belladonna, calcarea carb. hepar sulphur, mercurius, etc., in chronic abscess surpasses our comprehension.

A TEXTBOOK OF MODERN MATERIA MEDICA AND THERAPEUTICS. By A. A. STEVENS, A. M., M. D., Lecturer on Physical Diagnosis in the University of Pennsylvania; Physician to the Episcopal and St. Agnes Hospitals, Philadelphia. Third edition, greatly enlarged, rewritten, and reset. Octavo of 663 pages. W. B. Saunders & Company. 1903. (Cloth, \$3.50 net).

This edition represents practically a new book, as the work has been entirely rewritten. This is well for advances have been rapid

and changes many since the previous edition was put forth. Drugs are now classed according to their pharmacological action, instead of alphabetically as heretofore. Old drugs have been elaborately considered and all modern knowledge concerning them has been utilised; newer drugs, that is, such as are possessed of merit, have been carefully analysed; references have been omitted in order to economise space,—these and other features of the book will at once commend themselves to the searcher for facts.

The status of Stevens as a teacher is so fully established on a high plane that whatever he has to say commands respect and carries weight, hence there is safety in accepting this textbook as a guide for the student and practitioner. It is a complete modern treatise on the subjects with which it deals.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. V., Obstetrics. Edited by Reuben Peterson, M. D., Professor of Obstetrics and Gynecology, University of Michigan. 12mo, pp. 204. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

The object of this book is to give a resume of the best obstetric literature of the year,—a purpose in which it succeeds. It is constructed on the same lines as the previous volumes by the same author. The object of the series is primarily to place in the hands of the general practitioner of medicine that for which he would search the periodical and other literature, perhaps vainly; and place it promptly without loss of valuable time. This is particularly important for the obstetrician who may need suggestive aid in a pending case, and he will here find the latest thought on pregnancy and its complications; labor and its complications; the puerperium and obstetric surgery.

We commend the book for its careful preparation of the material it contains and for its value as an aid to the busy physician who engages in the practice of obstetrics.

SQUINT—ITS CAUSES, PATHOLOGY AND TREATMENT. By CLAUD WORTH, F. R. C. S. Philadelphia: P. Blakiston's Son & Co. 1903.

In these days of much bookmaking, a writer who has original ideas and who presents them in a clear forceful way so as to carry conviction, is entitled to more than a perfunctory word of commendation. Such a writer is Claud Worth, whose studies on "Squint" have been most careful, and whose conclusions are revolutionary. Only the first chapter deals with a common subject in a stereotyped way. The remainder of the book is replete with careful observations, valuable suggestions and logical conclusions.

The most important of his studies is on the fusion function,—the causes of the amblyopia, which develops in the squinting eye, and the method of training, by which the sight may be pre-

served, if only the visual exercises prescribed are undertaken at a sufficiently early age. The writer makes the assertion not generally recognised by ophthalmologists that the fusion function is attained by the sixth or seventh year, and that the correction of the amblyopia depends upon treatment being instituted before this age has been reached. Children of two years, showing refractive errors and tendencies toward convergence, are given glasses (which can be accurately prescribed by the aid of the shadow test), and the fusion function, unless totally absent, developed by means of exercises with the amblyoscope. Operative measures are in this way, in many cases, altogether avoided, and when imperative, vastly better optical and cosmetic results are obtained if preceded by visual correction and training. The author follows Landolt in advancing a weak antagonist, rather than by excessive tenotomy of the stronger muscle, and a practical test of his method demonstrates it to be simple and efficient. The book, in a word, is worthy of a careful study, quite as much by the progressive general practitioner as by the specialist, as the future welfare of many eyes will depend upon the early and intelligent advice of the family physician.

F. P. L.

TWENTY-SECOND ANNUAL REPORT OF THE STATE DEPARTMENT OF HEALTH OF NEW YORK, for the year ending December 31, 1901. With maps. J. B. Lyon Company, Albany, State Printers. 1902.

This is the first report issued under the present organisation of the state health department, or since it became a single-headed commission. It contains the usual material that pertains to such documents and is arranged under the following heads: (1) the sanitary condition of the state; (2) water supplies and drainage; (3) investigation of alleged nuisances; (4) investigations ordered by the governor; (5) bureau of chemistry; (6) bureau of pathology and bacteriology; (7) bureau of vital statistics; (8) antitoxin laboratory; (9) cancer laboratory; (10) conference of sanitary officers; (11) examination of embalmers; (12) Barren Island and Cheektowago; (13) recommendations; (14) financial report.

A considerable part of the report relates to a comprehensive system of sewerage for the village of Plattsburg, which appears to have been a much needed improvement. A large collection of maps prepared by engineers accompanies the report. Several of these relate to the village of Depew. The document does not differ in appearance from those that have preceded it.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. WILLIAM WARREN POTTER, M. D., Secretary. Vol. XV. For the year 1902. New York: Stettiner Brothers. 1903.

The volume of annual transactions, published by this association, is equal in general appearance and quality of contents to any similar publication with which we are familiar. The meeting, the

proceedings of which this volume records was held in the city of Washington, under the presidency of Edwin Ricketts, of Cincinnati. General George M. Sternberg, Surgeon-General United States Army (retired), delivered the address of welcome, which abounded in felicitous rhetoric, and was a model of good taste. The president appropriately responded, and then presented a gavel to the association, the head of which was made of a girder from the home of Ephraim McDowell, at Danville, Ky., where the first ovariectomy was performed, and the handle from a hickory joist, taken from a house near Greenfield, O., in which Alexander Dunlap, September 17, 1843, performed his first ovariectomy. The incident was one of interest and the president was accorded hearty applause and congratulation, with a vote of thanks for the gift. The scientific papers and discussions are among the best the association has yet published.

BOOKS RECEIVED.

Nurses' Guide to Surgical Bandaging and Dressings. By William Johnson Smith, F. R. C. S., Principal Medical Officer, Seamen's Hospital, Greenwich. Philadelphia: J. B. Lippincott Co. 1903. (Price, 75 cents.)

Diseases of the Nose and Throat. By Charles Huntoon Knight, A. M., M. D., Professor of Laryngology, Cornell University Medical College. Octavo, 438 pages; 147 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$3.00.)

Transactions of the Medical Society of the State of New York. Ninety-seventh Annual Meeting, held at Albany, N. Y., January 27, 28 and 29, 1903. Frederic C. Curtis, M. D., Secretary. Brandon Printing Co., Albany. 1903.

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A System of Physiologic Therapeutics. A Practical Exposition of the Methods, other than Drug-giving, useful for the Prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D. Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Volume VIII. Rest, Mental Therapeutics, Suggestion. By Francis X. Dercum, M. D., Professor of Nervous and Mental Diseases in the Jefferson Medical College of Philadelphia. Octavo, 332 pages. Philadelphia: P. Blakiston's Son & Co. 1903. (Price for the set, \$27.50 net.)

Scheme for the Differential Testing of Nerves and Muscles. For use in Diagnosis. By J. Montgomery Mosher, M. D., Clinical Professor of Insanity, Neurology and Electrotherapeutics, Albany Medical College. Octavo, 58 pages; illustrated. Albany: Brandon Printing Co. 1903. (Price, \$1.00.)

Blakiston's Quiz Compends. A Compend of Human Anatomy. By Samuel O. L. Potter, M. D., Author of the Handbook of Materia Medica, Pharmacy and Therapeutics. Seventh edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

Blakiston's Quiz Compends. A Compend of Diseases of the Skin. By Jay F. Schamberg, A. B., M. D., Professor of Diseases of the Skin, Phila-

delphia Polyclinic and College for Graduates in Medicine. Third edition, revised and enlarged, with 106 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

Manual of the Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M. D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York. Third edition, revised. Duodecimo, 421 pages, with 275 original illustrations, including 16 plates, with 36 colored figures. New York: William Wood & Co. 1903. (Price, \$2.00.)

ITEMS.

THE announcement is made of a work shortly to be published by Dr. G. Frank Lydston, entitled, *The diseases of society*, in which the questions of crime and the social evil will be discussed.

THE PRIZE ESSAY OF THE AMERICAN MEDICAL ASSOCIATION.—The American Medical Association offers annually a gold medal, value of \$100, for the best essay on any subject relating to medicine or surgery. The recipient of this prize will be given the option of the gold medal, or a bronze replica of the medal, and the balance of the appropriation (about \$90) in money; or the entire amount (\$100) in money. Inasmuch as the association annually sets apart the sum of \$500 for original research, this prize is offered to stimulate the production of a superior practical paper based either upon experimental studies or clinical investigation, or both. The committee will give preference to papers having the greatest brevity consistent with thorough consideration of the subject, and recommends that the paper shall not exceed 5,000 words. The committee, while not restricting the choice of subjects, recommends as an important subject for consideration The therapeutic value of the digestive ferments. Competing essays must be typewritten, and bear no mark revealing their authorship; but instead of the name of the author there must appear on each essay a motto, and accompany each essay a sealed envelop containing the name of the author and bearing on its outer surface the motto of identification. No envelop will be opened by the committee until a decision has been reached as to the most deserving essay. The other essays will be returned to their respective authors. The committee reserves the right to reject all essays, if none are found worthy of the association medal. Competing essays must be in the hands of the chairman of the committee not later than April 1, 1904. Lewis S. McMurtry, Louisville, Ky., chairman; Burnside Foster, Saint Paul, Minn.; M. H. Fussell, Philadelphia, Pa., committee.

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ORIGINAL COMMUNICATIONS.

Our Relations to a Few of the Problems in State Medicine.¹

By JOHN L. HEFFRON, A. M., M. D., Syracuse, N. Y.

AT THE opening of this the 36th annual meeting of this association, permit me to thank you for the honor you conferred upon me by making me your president. This association is a voluntary one and has no connection with any other medical body by obligation or by law. It has recognised preëxisting county medical societies and has asked them to select delegates as a matter of compliment, and to secure the most representative medical men in our territory.

There is a great advantage in such an association and we owe much to that wisdom of our founders which determined that this body of medical men should devote itself wholly to scientific improvement, and to the cultivation of a better acquaintance amongst the physicians and surgeons of central New York. Taking up the work in this spirit, your president has the pleasure of saying that, up to this point, the burden of office has been light. In response to the cards mailed in July we are able to lay before you an inviting program of scientific papers.

But now, Ladies and Gentlemen, that I bow my neck to the yoke shaped by our predecessors, I am conscious that it is not an easy one. Presidential addresses to medical societies group themselves usually into two general classes. One deals with the history of medicine and traces the sources of our power; the other brings some fresh contribution of thought to enrich our present possessions. I have chosen neither course, but, at the risk of imposing upon your good nature, I shall raise my voice to a very old tune. The impulse that compels me is the very fact that it is

1. Presidential address at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

such a familiar strain and that there are no new notes to be added. Because we need at times to revive familiar facts and make them burn like the living truths they really are, I shall attempt to discuss

OUR RELATIONS TO A FEW OF THE PROBLEMS OF STATE MEDICINE.

The prevention of disease is the goal toward which the profession is striving. Every solid advance in the definite knowledge of the etiology of diseases and the methods of controlling their causes is a step forward. But technical knowledge alone is not sufficient. It cannot be made effective in a Republic without the support of the people. The instinct for the preservation of one's own life in the presence of immediate or impending danger is uppermost in the breast of every human being, savage or civilised. Humanitarian sentiments that consider the welfare of the race as a whole are rare save in the minds of the most advanced of the civilised nations. In the presence of danger we all revert to the original type. This has been signally illustrated in the history of the great epidemic diseases that have swept our communities. It is to the response from the selfish instinct for self-preservation of the individual life as much as to our perfected knowledge of the methods for controlling the ravages of the deadliest epidemic diseases, that typhus fever and cholera have been swept from the face of the earth and smallpox and yellow-fever have been so greatly controlled.

It is the dramatic quality of events in life which makes the deep and abiding impression. The life that now is in all its fullness and tomorrow is cut off by an epidemic disease so quickly fatal as cholera, is a tragedy that horrifies everyone. No measure, however extreme, will seem too severe to check its deadly onward march. But the demonstration that many other diseases, less acute in their manifestations, and killing not so large a proportion of their victims, and then only after a struggle of weeks or months in weary battle with the resisting forces of the individual, are also infectious and preventable, is the work of the present generation of medical investigators. The pioneers in this field are still living or are scarcely cold in death. It seems incredible that such another period of advance in the etiology and pathology of infectious and communicable diseases can ever again be witnessed in the history of the world as has been recorded in the last half of the XIXth century. Think of it. The cellular pathology of Virchow, that versatile old man but just gone from amongst us, has been established upon a basis of demonstrated fact which seems impregnable. The germ theory of infectious diseases,

vaguely foreshadowed since the first epidemic was intelligently observed, and to which Pasteur, only yesterday with us, so nobly contributed, is accepted by the scientific world.

The people, however, have not yet appreciated these facts. So many generations of false teaching, so long a familiarity with the manifestations of typhoid fever, tuberculosis and kindred diseases, so many centuries of the preaching of the damnable doctrine of "The dispensation of a mysterious Providence," have deadened their sensibilities. They witness with apparent equanimity the long procession to a certain grave of thousands of their fellow men annually. They resent every effort to control these plagues which we have demonstrated over and over again are no less real than cholera though less dramatic, if such measures seem to curtail their personal liberty to do as their own lack of knowledge and judgment dictates. They have those amongst them, commonly considered intelligent on other subjects, who through wilful ignorance, I will not say maliciously, cast suspicion on the motives and on the worth of scientific medical investigators, and prejudice the public mind against their teachings and their reiterated warnings. They have journals, so attractive in their legitimate fields as to secure the widest circulation, that apparently delight in periodic attempts at ridicule of such immortals as Jenner, Virchow, Pasteur and others whose work we are proud to recognise as of the greatest value to humanity. It is against such blind and wilful ignorance, such malicious minds, such prejudice and much lawlessness that the state department of public health, of which we are coadjutors, is compelled to array itself in an attempt to carry forward the work of preventing and controlling the ravages of typhoid fever and tuberculosis and of keeping from the people a renewal of the horrors of epidemic smallpox.

TYPHOID FEVER.

Our country enjoys the unquestioned distinction of having contributed more to the definite knowledge of typhoid fever than any other nation in the world. The identity of the disease, the nature of the infectious germ, its various modes of distribution, the laws of its growth and multiplication, its distribution in an infected individual, its usual and unusual seats of activity, the effects of its products, and the ways of preventing its entrance into the human body, are definitely known. There is no longer any mystery about it. The demonstration is as complete as is that of any problem in mathematics. Other nations have taken intelligent action upon this solid foundation of knowledge and the empires and kingdoms of the continent of Europe have greatly

diminished its autumnal sacrifices. We, with a form of government which derives its power from the people, are a whole generation behind them. Our annual visitations of typhoid go on apparently unheeded. The strength and glory of our young men are ruthlessly cut down with little thought that it is an unnecessary sacrifice. Our beautiful lakes, majestic rivers, and babbling brooks are rendered deadly; and not until some widespread epidemic of the disease in a prominent community occurs, do we consider deeply the awfulness of this condition of things.

Since our last meeting what an appalling illustration of this fact has this section of our state in particular, and the entire country in general, had in the epidemic of typhoid at Ithaca. While some in many communities are questioning the accuracy of the assertions of scientists, and others are hesitating to impose upon their city or village the seemingly heavy burden of expense necessary to prevent the occurrence of such an epidemic, it will pay us to stop a moment and consider some phases of this epidemic. No official report of it has yet been attempted. Because the population of Ithaca includes large numbers of university students, many of whom left the city in the early days of the epidemic, it will be difficult to collect accurate statistics. From facts published in the newspapers and in the reports of the president of Cornell University and from direct information, it would seem that there were at least 1,400 cases. The reported deaths among the students was 10 per cent. of those who were known to have the disease. No accurate figures for the total deaths from the epidemic can be obtained, but it is fair to assume that the rate was not less than that exhibited among the students of Cornell.

The epidemic was directly traced to an infected water supply owned and operated by a private company. The impounded water was supplied by creeks running through farm lands, and the watershed was not under any supervision by the company. Upon investigation this watershed was found to present every possible form of pollution to the stream which drained it, though the specific infection is supposed to have come from some of the workmen engaged in the construction of a new dam. The epidemic greatly crippled the work in Cornell University. It paralysed the business of Ithaca and entailed unmeasurable anxiety upon all her citizens. The story of the suffering and grief which it caused could not be told in a book. If accurate figures were at hand it would be possible to show what was the entire cost in money of this epidemic. Such an argument is of value because so many think only or largely of the money that is required to secure needed sanitary

measures for a city. A half million dollars would seem an enormous sum to such, if a proposition to appropriate that amount were made to secure a wholesome supply of water for a city of the size of Ithaca; but I will venture to predict that when some future statistician shall gather together the items of the expense of this epidemic to individuals, to the university, to the city and to the state, that sum will be greatly exceeded. This same lesson has been taught in the same heartbreaking way many times before and it will doubtless be repeated, with all its attending horrors, many times to come, but, if we in central New York shall have learned it this once for all time, this epidemic will prove to us a blessing.

There are certain measures which we must demand from the state or from such governmental bodies as control watersheds, if we are to have a pure water supply. To prevent typhoid fever the state must first compel the protection from pollution of all kinds of all watersheds which drain into waters granted to municipalities for public water supplies, and it must compel all private corporations, to which it grants permission to furnish water to a community, to comply with this provision. It must compel the sterilisation of all sewage before it is discharged into public waters that are sources of water supply. Think of the present condition of the majestic St. Lawrence, the picturesque Hudson, and the beautiful Black River, and the charming lakes of our own vicinity and of the Adirondacks! The people have a right to unpolluted lakes and rivers and streams and the time has come when they should demand them. Because practically all of our available sources of water supply are already infected, it must compel the instalment of competent purification plants as adjuncts to all water systems. It must compel the abandonment of all wells in cities or villages furnished with wholesome water.

Our individual responsibilities are not slight or valueless. In every case of typhoid we must seek earnestly to trace the source of infection and we must not rest content with negative evidence. Remember the brilliant demonstration of Dr. Hutchings, of the Ogdensburg State Hospital. After many failures to locate the source of infection in an epidemic in that hospital a year ago, he finally traced it to infected ice and cultivated the bacilli from ice that had been stored nine months. We must instruct our nurses in the methods which will absolutely sterilise the various excreta before they are disposed of in any way whatsoever, and we must not take it for granted that they are masters of such methods, from whatsoever training school they may have received their diplomas. We must see that the clothing used on or about the

patient is properly disinfected before going to the laundry. We must know that everything which is consumed by the patient and his family is so prepared that, if infected, it will be rendered sterile. We must second the efforts of our local and state health officers and stimulate and encourage their efforts to safeguard the health of the people. By such individual and combined action we can hasten the day when the people will move with resistless strength against this enemy, which is so vulnerable and so exposed.

TUBERCULOSIS.

The problem of the control of tuberculosis is now generally conceded to be one of the important problems of state medicine. Your president has so recently reviewed this subject that he will spare you a reiteration of facts so well known to you all. Since last January some notable contributions to the prognosis of tuberculosis have been made which deserve particular mention and emphasis. Hitherto the opinion has been that, while an individual might recover from the disease, he was insecure in his tenure of life and in almost constant danger, certainly in greater danger than the healthy man, of a recurrence of the disease. In a notable paper at the Congress of American Physicians held at Washington last May, Trudeau called attention to the fact that his infected animals in which he had obtained a cure, were apparently immune to a reinfection of tuberculosis. In a private letter on the subject of immunity to the writer he said, "a really healed lesion may increase the resistance or immunity, as few of the 60 per cent. who have old lesions seem to relapse." Maragliano, in his paper before the World's Congress of Physicians at Madrid last spring, said, "when a patient is surely and completely cured of a pulmonary tuberculous focus, with the formation of a sclerotic tract in the area of a previous infection, he generally remains thereafter permanently unsusceptible to tuberculosis." If this conclusion shall prove to be true, what a new aspect of hopefulness and what added impulse to our enthusiasm in the combat against this disease will be conferred upon us! But the accent in all communications is on the "really healed." It will require our keenest powers and most accurate methods to determine this point. An eminent physician who has a tuberculous focus, quiescent for many years, accidentally inhaled some tuberculin he was making. He developed a most marked and distressing reaction which incapacitated him from work for some time. This incident illustrates not only the fact that a quiescent focus is not of necessity a healed lesion but also that in a supposedly healed lesion, when other methods of discrimination

fail, the truth may be elicited by the employment of Koch's original tuberculin.

The fear that came upon us lest Koch's latest word concerning the nonintercommunicability of human and bovine tuberculosis and his illogical conclusions from his observations, might call a halt in the crusade against tuberculous cattle, was happily unfounded. The last word has not yet been said on that subject, but enough facts have been accumulated to sustain health boards in their work. Independently of the question of the intercommunicability of this disease, the people insist upon protection against the products of cattle suffering from disease of any kind whatsoever, and so there is little danger that the work of exterminating tuberculosis amongst dairy herds will cease until that object has been accomplished.

In the control of tuberculosis the time has come when we need more activity on the part of the physicians in general. The various state sanatoria have proven entirely successful from whatever point they may be viewed. Our own state sanatorium will prove an inestimable benefit even though it can accommodate so few of our infected poor, and will mark the beginning of the proper care of these unfortunate ones. The duty of the state is to so care for the tuberculous who are a public charge that they can have every advantage for the curative treatment of this disease. Such a state of things cannot be brought about by establishing special hospitals in connection with institutions for the housing and care of the indigent and helpless poor. There must be in every city and in the center of every territory with a given population, a special hospital for tuberculosis to which patients will be attracted by the superior advantages for recovery and to which it will be considered no stigma to be taken.

Our personal duty in hastening a solution of this problem is, first of all, to educate every sense and cultivate every method by which an early diagnosis can be established, for the prognosis is proportionally more favorable the earlier the diagnosis is made, and he is not fit to practise medicine who cannot diagnosticate tuberculosis until the bacilli are demonstrated to be present in the sputum. Having established in ourselves an enthusiastic belief in the curability of tuberculosis we are prepared to communicate it to our patients and to the public, and to teach them every detail of personal hygiene and public precaution necessary to be carried out. The records of the many institutions devoted to the care of the tuberculous are easily accessible to every physician. Armed with these facts, which prove the curability of the disease and the great financial gain to the public from such cure, we are prepared

to go forward and hasten the day when the tuberculous poor of every community shall be properly treated.

SMALLPOX.

The dangers of the recurrence of epidemic smallpox are unquestionably increasing. The old adage says, "the constant dripping of water wears away the stone." The public utterances of those who oppose vaccination, now more brazen than for half a century, and the sense of security resulting from nearly a hundred years of deliverance from this awful pest, have not been without an unwholesome influence. The rigidity with which our laws governing vaccination have been enforced has been relaxed and our sense of personal responsibility has perceptibly diminished. How many family physicians now vaccinate the infants who enter the world by their help? And yet that was considered an obligation a generation ago. In how many communities where vaccination is required before a child can enter the public schools is equally strict attention paid to the children who enter parochial or private schools? The law requiring revaccination after the establishment of puberty is essential if a community is to be really protected, but is that law carried out? In how many institutions for higher learning and in how many factories and stores employing large numbers of people is any such qualification as recent and successful vaccination required?

Our relations to this problem may be briefly summarised. We must not be influenced by the ignorant clatter of the antivaccinationists. We must be ready "with chapter and verse" to show the wavering that immunity against smallpox is conferred by vaccination. The arguments against vaccination today are no different and no more potent than those which assailed Jenner and over which he so signally triumphed. It is an inspiration to re-read the records of his life, to bring before our imagination the picture of those devastating years before his immortal discovery, and to contrast with them the records of the nearly completed century since vaccination was carried out in all christendom. We would commend to all opponents of vaccination (and to all friends too for that matter) the perusal with an open mind of that number of the *British Medical Journal*, published July 5, 1902, and we would ask *Life* to republish for the benefit of its many readers the graphic illustrations of the death-rate before and since the advent of vaccination which appeared in the article of Arthur Newsholme on "The Epidemiology of smallpox in the XIXth century." The abuse of vaccination by careless operators can and should be checked. The simple laws of surgical

asepsis are as necessary here as in major operations. The operation of vaccination should be so carried out that no secondary infection can be possible. We must insist on surgical cleanliness in the operation and that we be supplied with a virus free from all impurities, yet not emasculated. It is my opinion that such virus should be prepared and distributed under the direct supervision of a state officer and in no other way. We must see that the children in the families we attend are vaccinated early in life and again after the establishment of puberty, and we must support the local boards of health in the performance of their whole duty in this important matter.

All this is trite. It has been said over and over again. It will be repeated many times to come. The hearts of communities will bleed again and again because of their punishment for their sins against God's laws of sanitary living. But there shall come a time,—how far off we cannot foresee,—when the eyes of the people shall be opened, their ears unstopped, and their hands shall eagerly work out their own physical salvation.

528 S. SALINA STREET.

Bilateral Abductor Paralysis of the Larynx.

By ADOLPH H. URBAN, B. S., M. D., Buffalo, N. Y.,

Clinical instructor of diseases of the nose, throat and ear at the University of Buffalo, Medical Department and laryngologist and otologist to the University and German Hospital Dispensaries.

BILATERAL paralysis of the abductors of the larynx is a relatively rare condition and as few cases have been observed, much less reported, I consider the following one, which I shall dwell on more fully later, of sufficient importance to be published.

Loss of function of the dilators of the larynx is clinically observed as paralysis of the vocal cords and as such is seen by means of the laryngoscope. The muscles affected in this condition are the posterior cricoarytenoid, which separate the vocal cords. In briefly alluding to the nervous aspects of this variety of laryngeal stenosis, we find that opening of the glottis during inspiration, accomplished by the activity of these muscles, is presided over by a distinct medullary center. The motor nerve-supply is furnished by the abductor filaments of the inferior laryngeal nerve, the latter being the recurrent trunk of the pneumogastric.

Although a brief summary of this subject may be more aca-

demical than clinical it is, nevertheless, interesting. It was only in the year 1880 that we find such a careful observer as Störk¹ affirm that this was one of the rarest of laryngeal paralyses. Previous to this time in 1876, Riegel² in his work on Respiratory Paralysis had mentioned this condition as bilateral paralysis of the abductors of the vocal cords. A few cases had also been reported during this period by Von Ziemssen³, Bosworth⁴ and others. The first careful description of this condition was in 1878 by Semon⁵. He evolved his doctrine of the greater vulnerability of the abductor filaments of the recurrent nerve to injury from disease or trauma. This was primarily and entirely propounded and based on careful clinical observation and not on experimental researches as heretofore. In 1881, Semon⁶ elaborated on this theory. At this period Rosenbach⁷, working independently, made his own researches and arrived at the same general conclusions. They established the fact, now recognised as Semon's well-known law⁸, "that paresis confined to the abductors is commonly, if not always, due to organic changes in the pneumogastric or recurrent trunk, or in the medulla." In so many words, they declared that the abductor muscles were regularly the first and often the only muscles affected in progressive organic laryngeal paralyses, and that the paralysis of the adductor is always secondary to paralysis of the abductor muscle.

Meanwhile Jeleneffy⁹, Krause¹⁰, and several other subsequent writers had advanced the "contracture theory" which claimed that the spasm either with or without paralysis of the abductors was due to various stimuli, irritating either the nerve trunks or their cerebral centers. In other words, they claimed that instead of paralysis of the abductors, it was clonic spasm of the abductors that produced the stenosis. From this it will be observed that this latter view tended to invalidate the law formulated by Semon, Rosenbach and others.

The explanation, however, of the Semon-Rosenbach theory was more or less hypothetical until Risien Russell^{11, 12}, as well as Onodi, established the fact that the nerve fibers for adduction and abduction of the vocal cords run in distinct bundles during the whole course of the nerve trunk, and that the fibers for the abductors are for the most part at the inner tracheal, while those for the adductors are at the outer side of the recurrent. More recently Grabower¹³, by a special method of staining, has found a marked difference between the nerve endings of the abductor and adductor filaments in these muscles and believes that further future investigations will explain this abductor proclivity. Horseley¹⁴ and others supported the Semon school in their con-

tributions to this subject. At a still later date, 1898, Grossman¹⁵ has endeavored to demonstrate by a series of experiments that both the Semon law and the Krause "spasm" theory could not be maintained, but his view, apparently, is not supported by adequate clinical observation.

After many years of controversy it might be stated definitely that the Semon view has held the balance of power and is at present the generally accepted one. It is therefore supposed that the median position of the vocal cords denotes interference by disease or trauma with a separate abductor nerve bundle, either in the recurrent nerve or its cerebral origin. Again, if the abductor muscles are more liable to disease or, in other words, offer less resistance to injury or central lesions, it has been correctly inferred that they are the last to recover when a paralysis of the recurrent is gradually improving. To affirm this, Elsberg¹⁶ reports a case in which a bilateral recurrent paralysis terminated in a bilateral abductor paralysis, necessitating tracheotomy to avoid suffocation. This greater recuperative power of the adductors has also been exemplified in cases cited by Semon¹⁷, Makins¹⁸, Williams¹⁹, Gleitsmann²⁰.

It may be well to remember that the posterior cricoarytenoid muscles are in a relatively exposed location in the larynx and in ceaseless activity. In quiet breathing this latter phase is not readily apparent to the eye. Although we have now noted that the abductor filaments run separately through the nerve trunk, nevertheless the fact remains that they are not in the most exposed position, nor would the anatomical location of these dilator muscles afford a satisfactory explanation of the actual condition of affairs—namely, that the abductors yield more readily to paralyzing influences. The true pathogenesis of this special proclivity of the dilators of the larynx is, therefore, as yet a more or less obscure problem. As in other paralyzes the lesions causing bilateral abductor paralysis may be either central or peripheral and are always organic.

The most frequent central cause is tabes dorsalis. According to Lennox Browne²¹ this condition "is essentially the product of tabes." Others in their order of frequency are progressive bulbar paralysis, cerebral hemorrhages and softenings, cerebral lues, malignant tumors, abscesses and aneurisms producing compression of bulb, amyotrophic lateral sclerosis, syringomyelia. Lennox Browne²² states that "disseminated sclerosis and progressive muscular atrophy may be thought of, but since these tend to complete recurrent paralysis, it is a rare coincidence to detect their initial effects (*i. e.*, abductor paralysis) simultaneous on both

cords." Considerable doubt still exists as to whether diphtheria can be an etiological factor centrally by producing nerve disturbances through the medulla. Luc²³ admits this, although he believes that it attacks the peripheral nerves much more frequently.

Amongst the peripheral causes may be mentioned tumors of the neck, especially thyroid growths. Tumors at the base of the brain are in order of frequency, gummata, carcinoma and sarcoma. Other lesions are pachymeningitis, tumors of the mediastinum, aneurisms, especially of the aorta, carcinoma of the esophagus (located high up), trauma, enlarged peribronchial lymphatic glands, pericardial effusions, pleuritic adhesions; these must of necessity involve the recurrent nerve bilaterally during its course to produce,—abductor paralysis duplex. Rheumatism and alcoholism as etiological factors are still problematical. The most frequent peripheral causes, however, are infectious diseases as well as toxic poisonings. Amongst the former might be mentioned influenza, diphtheria, pneumonia, the acute exanthemata, syphilis and typhoid. Toxic influences are chiefly lead; there are also instances of paralysis arising from copper, antimony, phosphorus, arsenic and atropin. Occasionally, we must deal with simple anginas, catarrhal conditions and exposure to cold. Impaction of foreign bodies, notwithstanding their removal, has caused this stenosis. Bruggisser²⁴ reports the case of a man, aged 24, with a rubber plate containing two false teeth in the larynx. The obstruction was removed on the eighth day but was followed by a complete bilateral abductor paralysis; tracheotomy had to be performed to relieve the condition. Hysteria, though purely functional, is reported to have brought about the same result; conclusive evidence, however, was lacking.

During inspiration the laryngeal mirror in bilateral abductor paralysis shows the vocal cords lying motionless near the median line instead of being separated by the action of the dilators. In expiration the cords are forced asunder by the current of outgoing air. The phonatory image is not affected and hence in ordinary conversation the voice is influenced little, if any. In this stenosis the dyspnea increases during the hours of sleep, owing to the fact that the dilator muscles of the larynx are during that period no longer under the control of the will. The diagnosis of the condition is generally a not very difficult one. In fact, as Riegel²⁵ has stated, in a complete paralysis the diagnosis can often be made without the aid of a mirror. However, there have been well marked tabetic cases in which the inspiratory dyspnea was totally absent; in such instances the eye was a diagnostic necessity.

In objective appearances severe spasm of the glottis is the most frequent source of error in diagnosis. In contradistinction to paralysis, however, the dyspnea in stridor usually improves at night; the cords are not held rigidly in the median line but waver more or less, causing a constant variation in the amount of adduction; in addition, laryngeal spasm generally attacks very young, neurotic children; again, if examined closely, the cords at the end of expiration will be seen to separate of their own accord, which does not happen in paralysis. Ankylosis of the cricoarytenoid joints, due especially to carcinoma of the esophagus, tubercular or leucic laryngitis, may at times be difficult to differentiate from the lesion under discussion. Perichondritis of the cricoid, injury to the cricoarytenoid articulation, and rarely congenital ankylosis may be thought of. It is also to be remembered that a cicatricial contraction on the posterior aspect of the larynx between the arytenoid cartilages, may produce an image simulating this condition (Sidlo)²⁶. Again, a malignant new-growth in the subglottic space (Semon)²⁷, or an abscess located between the posterior plate of the cricoid and the postici muscles (Kuttner)²⁸ may cause a rigid median position of the vocal cords. Without entering into the subject, I might mention that the determination of the focal lesion causing the bilateral paralysis is of necessity the most important and very often the most difficult question.

This form of laryngeal palsy follows a very variable course. In some cases a certain degree of double sided paresis may remain stationary for years, in others we can observe the gradual transition to a complete paralysis. Again, an absolute loss of function may not alter its aspect for a long period, while another may pass into a more or less complete recurrent paralysis. In many instances, particularly in tabes, the condition is absolutely symmetrical, while in others, both due to central (*e. g.*, pachymeningitis) or peripheral (*e. g.*, carcinoma of the esophagus) causes, we find a complete, unilateral posticus paralysis, in fact, occasionally a total recurrent affection, whilst the other cord exhibits only a beginning loss of power. Thus we see that not only does the laryngoscopic image, but the voice and respiratory symptoms vary within a wide range.

The prognosis naturally depends entirely upon the causal effect. Occasionally, however, we see extreme cases of tabic and bulbar origin go on for years without leading to consequences of more serious import. On the other hand, in some peripheral varieties of chronic, progressive character we must give an unfavorable prognosis for eventual recovery. In diphtheritic laryn-

geal palsies, such as the following case is an exhibition of, the prognosis is generally comparatively favorable.

Although it is not within my power to add anything new in regard to the etiology or treatment, yet the case to be reported only again confirms the law that of the motor fibres of the larynx the abductors are the first to succumb to any lesion. It also exhibits very forcibly the slow recuperative powers of the laryngeal dilators.

The case in question which came under my care at the German Hospital in New York city, was a boy aged 15. He was admitted on the afternoon of the 26th of February, 1900. I saw the patient immediately after his arrival. The boy, who was suffering from dyspnea, had recovered from a serious attack of diphtheria six weeks previously; otherwise his condition had always been good. The family history was negative. For the last three weeks the respiration had been very noisy. This was especially so during inspiration, which was a distinctly fatiguing effort. When the patient was sleeping or making any exertion this noisy breathing became worse. Deglutition had not been interfered with nor was there any tendency towards the regurgitation of fluids through the nose. No history of any sensory symptoms was given. Upon examination it was found that the boy, who was very anxious and restless, was of good physique, but somewhat pale and emaciated. The physical examination was absolutely negative, the respirations were 27, and the pulse was 96 and regular. Though the chest was well-developed there was increased depression in the suprasternal and supraclavicular fossæ. There was no abdominal pain or vomiting, the bowels were constipated, the urine exhibited only a slight albuminuria. No eye symptoms were present; the hearing was unimpaired; the nares and pharynx were free. Inspection of the neck revealed nothing abnormal. Neither the sphincters nor the muscles of neck, face, palate, trunk and extremities were involved. Direct protrusion of tongue was possible; gait and reflexes were not influenced. The examination of the larynx showed the vocal cords lying almost in apposition in the median line. In expiration they seemed to be pushed apart by the current of the outgoing air, while in inspiration they approached each other closely, causing the chink of the glottis to become a mere cleft. There was no perceptible hyperemia or infiltration of any part. There was no anesthesia of larynx or pharynx. The voice was only slightly affected, being somewhat coarse and weakened, the speech being free as long as the inspired air in the lungs lasted after which the patient paused and made a forced inspiration accompanied by a very marked elevation of the shoulders. There was absolutely no pain; the expression of the face was extremely anxious.

In the presence of this characteristic laryngeal condition and the subsequent course of the disease, there was hardly any doubt but that we were dealing with a post-diphtheritic bilateral abductor paralysis of the vocal cords. Operation was decided upon and tracheotomy fixed for two days later. During the following night the inspiratory dyspnea and noisy, stridulous breathing became more pronounced. The next morning the condition became much worse. Preceded by terrible anxiety and apprehension but without convulsions, the patient suddenly became very cyanotic, ceased breathing and lost consciousness; the pulse became very rapid, at times scarcely perceptible; death from suffocation seemed imminent. Without any anesthesia and while artificial respiration was being resorted to, I immediately performed tracheotomy, the incision being made below the isthmus of the thyroid. No difficulty was experienced.

After the insertion of the tube, which occupied but a few moments, and during continued artificial respiration the patient slowly began to breathe freely and easily. The cyanosis gradually disappeared and the pulse slowly improved. Rest was enjoined and rectal feeding resorted to. The boy was kept warm and made an uncomplicated recovery from the operation. Two days later the patient was nourished per mouth on a fatty, nutritious diet and placed on strychnine, iron and arsenic. Electricity, in the form of the galvanic current was employed. The patient rapidly gained in weight and appearance and was discharged from the hospital on March 18, 1900. The tube has been worn constantly ever since, *i. e.*, for a period of three and one-half years and has given entire relief. At the present writing the general condition is much improved. By placing the finger on the mouth of the tube the boy can breathe with but little difficulty for several hours when, however, the respiration becomes slightly tedious and labored. The speech is clearer and stronger than formerly. The boy feels fairly comfortable, having become accustomed to the constant wearing of the tube (to be dispensed with at an early date.)

In discussing the operative treatment of this case Semon's indication²⁹ for prophylactic tracheotomy, namely, "when the greater widening of the glottic space can not be brought about by suitable treatment," would have been present whatever the course of the condition. Intubation would only have been a temporary expedient and it would have been necessary to follow it very soon by tracheotomy. Permanent intubation certainly seems entirely irrational. As regards thyrotomy and excision of a vocal cord³⁰, this surely cannot be compared to tracheotomy, especially as the effect of the former operation not only produces permanent complete aphonia, but practically defeats its intended object by the consequential cicatricial formation in the larynx.³¹ Section of the re-

current nerve, advised by Geronzi³², but opposed by Ruault³³, to attain the so-called cadaveric position could only possibly be justified in cases in which the etiological factor is steadily progressive and would certainly never be the indication where there is any prospect at all of recovery.

As regards the medicinal treatment the most useful and valuable drugs are strychnine, arsenic, iron and phosphorus. Electricity is a resource of undoubted value and at that time in our case the galvanic current employed by both the extra- and endolaryngeal method was the most beneficial for the reason that the palsy was a comparatively recent one. Since then both the galvanic and faradic current have been alternately employed.

The history of the case pointed undoubtedly to diphtheria, and as no conjoined disorders of any nerve centre were present, we were evidently dealing with a chronic localised degeneration of the abductor nerve-filaments in, as well as an atrophy of, the laryngeal dilator muscles. The direct cause of this was a peripheral toxic neuritis. The main point of clinical interest,—the scientific side of the question having been sufficiently discussed,—is the fact that we had a purely primary bilateral abductor paralysis of the vocal cords of the larynx. Again, the same had continued practically stationary for over three years and only recently (during the past year) has the condition shown a tendency to eventual recovery. As diphtheritic paralytic sequelæ generally recover in from three to six months, this case certainly presented an exception to the general rule and was most probably due to an excessive focal toxic condition. This course of the lesion also precluded the possibility of mechanical alterations in or about the cricoarytenoid joint. Another interesting point is the sudden aggravation of the symptoms necessitating immediate tracheotomy. Cases with similar crisis as to sudden danger to life have been reported amongst others by C. W. Hartwig³⁴ and Semon³⁵.

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- 523 FRANKLIN STREET.

Diagnostic Palpation of Prolapse of the Kidney and Method of Fixation.¹

By AUGUSTIN H. GOELET, M. D.

Professor of gynecology, New York School of Clinical Medicine; gynecological surgeon to Metropolitan Hospital for Women and Children, New York, etc.

THE importance of prolapse of the kidney to the general practitioner is to be estimated by the frequency with which it is met with, particularly in women, and the diversity of the symptoms it gives rise to which are very misleading and are often attributed to other cause. It is generally conceded that it is to be found in 20 per cent. of all women or one in every five, and I have found by carefully prepared statistics in my clinic that it occurs in from 30 to 35 per cent. of all gynecological patients. It occurs seven times more frequently in women than in men, but it has been observed so often among street-car employees in the west that it has been designated "railroad kidney."

The question naturally arises when are we to suspect this condition and in what cases are we to look for it? I contend that all gynecological patients should be examined for it and that the examination should be instituted first while the patient is on her

1. Presented by invitation at the Fourth Annual Meeting of the Lake Keuka Medical and Surgical Association, August 11 and 12, 1903.

feet before she is placed in the recumbent position for the pelvic examination. This is essential because the kidney becomes replaced, as a rule, when the patient assumes the recumbent position, and is not always displaced again immediately upon resumption of the erect position; often not until the patient has been on her feet for a while or has become fatigued. I am sure that many of these prolapsed kidneys are overlooked because this rule is not followed, or because the examination is only made when the patient is in the recumbent position, for it is more readily detected when the patient is standing.

The symptoms found associated with prolapse of the kidney and which may be attributed to it, because they are overcome by fixing the kidney, or temporarily relieved many times by adjusting effective support for the organ by external pressure upon the abdomen, may be grouped under three general heads,², viz.:

1. Those denoting disturbance of the digestive organs, manifested by irritability of the stomach, loss of appetite, intestinal distention, constipation, recurring bilious attacks, with sometimes transient attacks of jaundice.

2. Those relating to disturbance of the circulation and nervous system, manifested by vertigo, syncope, palpitation of the heart, epigastric pain, insomnia, lassitude or unusual fatigue upon exertion, with hysteria and neurasthenia.

3. Those denoting disturbance of the genitourinary organs, manifested by diseases of the female pelvic organs, that may result from prolonged congestion, caused by pressure of the prolapsed kidney upon the ovarian vein, hence obstruction of the return circulation from the pelvis³, irritability of the bladder, which sometimes results in cystitis, and renal disturbances, such as result from interference with the circulation of the kidney and obstruction to the outflow of excreted urine from the kidney⁴.

METHODS OF PALPATION AS A MEANS TO DIAGNOSIS.

I shall describe only those methods of palpation that I have found most satisfactory after an abundant experience extending over a period of several years. The erect position is best adapted for detecting the kidney when displaced, but in some cases, especi-

2. These symptoms may be found described in detail in an article by the author entitled, "Diagnosis of prolapsed kidney, with illustrations of the method of diagnostic palpation", in the *International Medical Magazine* for June, 1902.

3. For an explanation of the Influence of prolapse of the kidney in producing female pelvic disease, the reader is referred to an article by the author in the *Journal of the American Medical Association*, August 23, 1902.

4. For explanation of the effect of prolapse on the kidney itself, the reader is referred to an article by the author entitled, "A study of the indications for nephropexy", in the *Medical Record*, December 20, 1902, and the *New York State Journal of Medicine*, July, 1903. Also the *Philadelphia Medical Journal*, September 6, 1902.

ally where there is rigidity of the abdominal wall, the recumbent position with the shoulders raised, as will be described below, is more conducive to satisfactory palpation, and in all cases when the kidney is not revealed in the erect position the patient should also be examined in the dorsal position. I have repeatedly emphasised the necessity of palpating for the kidney with the patient in the erect position before making the examination of the pelvis, because a kidney that may be considerably prolapsed when the patient has been walking or standing or even sitting, becomes replaced as soon as the patient is placed on her back and often it is not easily displaced even after she gets on her feet again. It is also difficult or even impossible many times to detect the



FIG. 1. GOELET—PALPATION.

minor degrees of prolapse (first and second degrees) when the patient is in the dorsal position.

To palpate the kidney in the erect position, the clothing is loosened about the waist, the corset being removed, and the abdomen bared from the border of the ribs to below the level of the umbilicus. The patient is made to stand erect upon both feet with the sacrum resting against a table not too low, a door, or the wall, so as to fix the pelvis, and she is made to bend forward with the pelvis fixed, thus flexing the spine on the pelvis which will secure relaxation of the abdominal wall. To still further favor relaxation of the abdominal wall she may stand on the opposite foot and rest that of the side being examined upon the toe. The examiner sits in front of her and if it is the right side that is to be palpated, he grasps the loin with the left hand, the fingers behind, with the middle finger at the level of the lower border of the last rib behind and the thumb in front at the level of the lower border of the last rib in front. (See illustration, Fig. 1). The patient is now directed to take a deep inspiration

and to expire slowly to the extreme limit. Upon inspiration no pressure is to be exerted by the hand grasping the loin, but upon expiration compression is to be made and maintained after it is complete, the patient being directed not to breathe again for a moment, or if it becomes necessary, not to breathe deeply. This grasp of the loin below the ribs, narrows the space through which the kidney must move and fixes it for palpation if it is prolapsed so that its upper pole descends below the border of the last rib in front (third degree).

Maintaining this pressure of the left hand upon the loin, with the thumb pressed well under the rib, the abdomen below is palpated with the right hand, as shown in Fig. 2. In this manner,



FIG. 2. GOELET—PALPATION.

if the kidney is prolapsed, the lower pole is caught by the finger tips of the right hand on the abdomen and the upper pole is forced up against the thumb of the left hand depressing the abdominal wall, just below the border of the rib above. Thus the size and location of the kidney can be readily made out if the abdominal wall is sufficiently thin or relaxed. To ascertain definitely that this is the kidney, the compression of the loin by the left hand is slightly relaxed and pressure upon the lower pole by the right hand causes it to slip up into position and as it slips upward between the thumb and finger of the left hand it can be distinctly outlined. If now the patient is directed to take a deep inspiration again while the grasp of the loin is only slightly relaxed, just sufficiently to permit the kidney to slip between the thumb in front and finger behind, it can be felt again as it descends.

The minor degrees of descent (first and second degrees), can

be made out only by this latter maneuver, the lower pole or lower half of the organ being grasped between the thumb and finger compressing the loin upon deep inspiration, but the kidney slips up and back into position when it is compressed.

If palpation is to be made for the left kidney, which is less frequently prolapsed than the right, the hands are reversed, the left loin being grasped with the right hand and the abdomen palpated with the left.

For palpation with the patient in the dorsal position, the manipulation is somewhat different. The patient is placed upon the back with a roll under the shoulders, over which the upper spine is flexed backward with the head touching the table or



FIG. 3. GOELET—PALPATION.

couch and with the thigh of the side to be examined flexed upon the abdomen and the foot resting in an easy position upon the table. This position bows the lumbar spine forward, throwing the kidney forward within easy reach, and effects complete relaxation of the abdominal wall. The examiner standing to the right for examination of the right kidney, places the left hand upon the lumbar region and with the middle finger depresses the lumbar region upward, just below the border of the last rib. Then, with the finger-tips of the right hand upon the abdomen at the lower border of the last rib in front, he directs the patient to take a deep inspiration, which displaces the kidney, if it is movable, and as the patient expires he forces the fingers deeply under the rib, depressing the abdominal wall. If the kidney descends to the third degree it is caught above its upper pole. (See Fig. 3).

If now he makes the thumb of his left hand take the place of his right, as in making the examination in the erect position, he

can hold the kidney displaced while his right hand is free for manipulation of the abdomen and palpation of the kidney.

One thing must be kept constantly in mind, *i. e.*, that it is essential to maintain the pressure of both the middle finger behind and thumb in front, so as to prevent the kidney from slipping back into position.

If the patient is nervous and the abdominal wall is rigid, satisfactory palpation is impossible. In such cases repeated examinations with intervals of rest is the only remedy. If the colon is distended it will frequently be impossible also to make out even a badly prolapsed kidney until the bowel has been thoroughly emptied by a cathartic or enema or both. When prolapse of the kidney is suspected and the examiner is in doubt it is wiser to request and make another examination under more favorable conditions rather than give a negative or doubtful opinion, since the next man to whom the patient goes for advice may discover it and apprise her of your error.

Examination under anesthesia may be called for in some cases, but is rarely necessary and is, as a rule, unsatisfactory, because of the position of the patient, and because being unconscious she cannot aid in dislodging the kidney.

Differential Diagnosis.—Having discovered a movable mass where the displaced kidney should be, there are several conditions from which it must be differentiated, *viz.*:

(1) A distended gall-bladder; (2) tumor of the pylorus; (3) tumor of the omentum; (4) growths in the intestine, particularly in the colon at the hepatic or splenic flexure; (5) impacted feces.

The distended gall-bladder usually lies more anteriorly than the prolapsed kidney and often forms a visible tumor, whereas the latter never appears as a visible tumor, unless the kidney is greatly enlarged and the abdominal wall is very thin. If the distended gall-bladder is displaced upward by pressure it moves directly upward and does not disappear upward and backward as does the kidney. If the tumor is a distended gall-bladder it reappears when the patient is in the recumbent position, whereas the kidney, as a rule, remains replaced in this position or is not dislodged except on deep inspiration.

Pressure upon the distended gall-bladder usually gives rise to considerable pain, while pressure upon the prolapsed kidney does not produce pain, though it may cause a sickening sensation, or the patient may flinch, because the kidney is sensitive or sore.

The chief characteristics of the prolapsed kidney is the facility with which it may be replaced, particularly when the patient is

on her back, and its range of mobility is frequently considerable, but the distended gall has a limited range of mobility and is not readily displaced upward. The kidney, however, sometimes becomes fixed in its abnormal position of descent as the result of perinephritic inflammation and cannot be replaced while at the same time it may not be wholly immovable. In other cases the kidney may be greatly enlarged as the result of turgescence, hydronephrosis or pyonephrosis or exudation and induration of the surrounding fat and form a very distinct tumor, too large to occupy its original position. In such cases there must often be an element of doubt in the diagnosis.

Tumors of the pylorus are nearly always associated with symptoms of obstruction and it is seldom that they can be made to disappear by palpation. When displaced by pressure they move directly upward and not upward and backward as does the kidney.

Tumors of the omentum are usually malignant and there is generally to be found evidence of malignancy elsewhere in the abdomen.

Growths in the colon, particularly those near the hepatic flexure, may be mistaken for the kidney, but repeated examinations in different positions, or distention of the colon with air or gas, should clear up the diagnosis. Anesthesia would aid very materially in making a diagnosis in these cases, but the bowel should be empty at first and distended afterwards if necessary.

Impacted feces making a tumor in this location can be removed by clearing out the bowel.

Indications for Operation.—Inasmuch as the kidney prolapsed to the third degree or beyond (that is, with its upper pole below the border of the last rib in front), cannot be effectively and safely maintained in its normal position by any means of external support, whether by belt or corset, and inasmuch as such support is often productive of serious injury to the kidney from the pressure it exerts, it may be said that prolapse of the organ to the third degree or beyond is indication for operation to secure its fixation in normal position.

I have often heard it asserted that there are many women walking about with their kidneys prolapsed, who would never know it if they were not told of it. This is very true and their symptoms are attributed to other cause and treated accordingly. There was never a greater mistake made than to suppose that such patients are free from the risks incurred by neglected prolapse of this organ. Incipient inflammation of the kidney may be found in many of these women walking around with undiscovered

ered prolapse of the kidney, which could be detected only by submitting the urine to careful, expert microscopical examination. I have found by careful analysis that 75 per cent. of the patients with prolapse of the kidney to the third degree who wear corsets have either a mild pyelonephritis or interstitial nephritis. It is well known that in addition to nephritis and pyelonephritis, hydro-nephrosis, pyonephrosis and atrophy of the organ may result from long-continued prolapse, because of interference with its circulation and draining off of the excreted urine.

But the indications for the operation are to be found:

1. In the disturbance or inconvenience arising from the prolapse which in many instances produces chronic invalidism.

2. The influence of the prolapse in producing disease of the female pelvic organs, which is not overcome except by fixing the kidney in its normal position.

3. The influence of the prolapse on the kidney itself, whereby its function is seriously interfered with, rendering inflammation of its structure constantly imminent. The prolapsed kidney must therefore be regarded as a crippled organ deserving, in consequence of its importance to the human economy, our best consideration.

If I hold, apparently, extreme views upon the indication for operation in these cases, it is because I have seen so often the folly of delay and the inefficiency and harmfulness of other attempts at relief. We have in prolapse of the kidney a condition that is inevitably progressive and one which seriously interferes with the circulation and function of the organ and the health of the patient; one which must eventually lead to serious disease of the kidney, and there can be no valid excuse for withholding an operation which involves no risk whatever.

Method of Fixation.—It is possible to secure satisfactory and permanent fixation of the kidney in its normal position without injury to its structure and without depriving it of its fibrous capsule. To accomplish this the attached colon must be completely detached to obviate subsequent dragging upon the kidney, which would either tear it away from its attachment or cause constant pain. The sutures must be inserted under the fibrous capsule only in such manner that they will not tear out, and they must be tied so that the suture loop will not loosen and permit the kidney to sag away from contact with the structures to which it is desired to have it adhere. In other words, close, uninterrupted contact of the kidney to the structures of the back until adhesion can occur is absolutely essential for success. Stripping off the fibrous capsule is by no means necessary and is objectionable be-

cause it inflicts an injury that may prove harmful. Cases have been reported where atrophy of the organ followed this procedure.

The patient is placed prone upon the table upon the chest, with a roll or rubber air-pillow eight inches in diameter under the abdomen. The operator stands on the patient's left for operating on both kidneys.

A vertical incision is made along the outer border of the erector spinæ muscle from the last rib downward for about three or three and a half inches. This incision is carried down through the fat underlying the integument to the aponeurosis covering the first layer of muscles. This is divided with scissors and the muscles beneath are separated in the direction of their fibers by means of blunt hooks and held apart by broad retractors. The erector spinæ and quadratus lumborum are retracted toward the spine. When the deep fascia, just beneath the quadratus lumborum, is reached it is punctured near the upper part of the field and split upward and downward to the extent of the wound with the blunt hooks and its divided margins are included in the retractors. This obviates wounding the ileohypogastric nerve and its accompanying vessel which cross the field.

The division of this deep fascia (*transversalis*) exposes the fatty capsule surrounding the kidney and it with a knuckle of intestine bulges up into the wound. To avoid wounding the intestine or opening into the peritoneal cavity, the fatty capsule is drawn down and opened at the upper part of the field and well over towards the spine. This is split up along the finger as a guide and the kidney is exposed. The margins of the fatty capsule are seized with T forceps and held by the assistant, who is holding the retractors. The kidney is now rapidly detached from the fatty capsule, to which it is always adherent in these cases as the result of perinephritic inflammation, and as it is loosened it is dragged upon and delivered through the incision on to the surface of the back. To facilitate this the lower pole of the kidney is freed first and brought up into the wound by traction upon the fatty capsule, and at the same time the patient is rolled downward upon the air-pillow so as to bring its pressure upon the lower border of the ribs which tends to force the kidney downward. To facilitate still more the delivery of the kidney it is seized with a piece of gauze held between the thumb and finger and dragged upon, but it should not be handled roughly. Care is taken now to free the kidney both upon its anterior and posterior faces quite around to the hilum and both poles, thus completely separating the attached colon in front. Where the detachment cannot be readily accomplished with the fingers scissors are used to divide unyield-

ing constricting bands. The ureter and pelvis of kidney are palpated carefully for stone, which if found are removed.

We are now ready for insertion of the sutures which are to hold the kidney in position until it can become firmly attached by adhesion. Two sutures are employed and the material used is silkworm gut. These are inserted in the manner shown in the accompanying illustration (Fig. 4): one at the junction of the middle with the lower third of the organ and the other at about its center and upon the posterior aspect of the free border of the kidney. These sutures are inserted only under the fibrous capsule which is left intact and both have three insertions. A

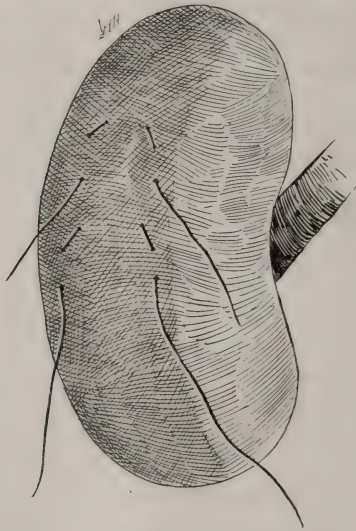


FIG. 4.—THE GOELET SUTURE.

very fine curved needle is used for carrying the sutures which are drawn through carefully so as to avoid tearing the capsule.

The redundant fatty capsule is removed preferably by tearing it away, care being taken to push the intestine back out of harm's way. The remaining fat is pushed down under the lower pole of the kidney which is then replaced; the upper pole first.

The ends of the sutures are carried through all the structures of the back at the upper angle of the lumbar incision from within outward and brought out upon the surface where they are tied over a fold of gauze placed lengthwise of the incision⁵.

This is readily accomplished with a long curved perineal needle

5. For a detailed description of this technique see article by the author in *American Medicine*, December 28, 1901.

with the eye near its point. When these sutures are tied the kidney is drawn up into its normal position with its upper pole under the ribs. The sutures are tied over the fold of gauze to obviate cutting into the skin and consequent loosening of the suture loop which would permit the kidney to sag away from its attachment.

In the majority of my cases I have employed a folded strip of gauze packed around and under the lower pole of the kidney, bringing the end out at the lower angle of the wound for drainage. Where there is much of the fatty capsule remaining this gauze packing keeps it from crowding between the kidney and muscle and preventing or limiting the area of adhesion, and it also serves to crowd the colon out of the way and furnishes additional support to the kidney, thus lessening the strain on the sustaining sutures. This is by no means essential, however, and when there is not much redundancy of the fatty capsule I do not use it. But I am careful to remove all blood from the wound and when the oozing from the kidney is considerable to use hot salt solution to control it.

The wound is closed by a continued suture of plain catgut, which approximates the upper layer of muscle and the aponeurosis and a subcuticular suture for approximating the skin. The usual dressing of absorbent gauze is applied. When drainage is employed it will be necessary to apply an abundant quantity of gauze to absorb the oozing and this should be renewed after 24 hours. The gauze drain when used is removed at the expiration of 48 hours.

The sustaining sutures are removed on the 20th day and the patient is permitted to get up on the following day. During the period of confinement to bed (three weeks) the patient must be kept strictly on her back if both kidneys have been operated on, being turned only partially on the right side to renew the dressings. If the right kidney only has been fixed the patient may turn on the right side from time to time to rest the back, but never on the opposite side as this would put undue strain on the freshly attached kidney and tend to loosen it.

Some care is necessary after the patient gets about to avoid unusual strains upon the kidney, and it is best that she wear an abdominal belt for several months, as a precautionary measure, and not resume corsets until the belt can be dispensed with.

Up to the present time, I have done 166 consecutive nephropexies on 130 patients, in 36 fixing both kidneys at the same time without a death and without a failure, so far as I have been able to discover. Hence, there is no mortality attending the opera-

tion, for what I have done any other careful, painstaking surgeon can do also.

2030 BROADWAY.

Gastrojejunostomy for Pyloric Obstruction.¹

By WILLIAM S. CHEESMAN, M. D., Auburn, N. Y.

THE patient, a tall emaciated farmer, aged 56, consulted me December 31, 1902. Thirty years ago he was laid up a month with pain in the region of the stomach, but so far as he knew, did not vomit or pass blood. Ever since then he has been subject to attacks of pain. These became so constant that he needed morphine daily by hypodermic. He vomited large quantities about once a week, but never blood. No tumor was palpable in the abdomen, but gastrectasia was demonstrated by auscultatory percussion and inflation. There was marked atheroma of the larger arteries, but the urine contained no albumin or sugar.

At the Auburn City Hospital a test meal showed presence of hydrochloric and lactic acids. Gastric lavage was practised here daily for a month, and the patient fed only peptonised milk and eggs. The relief from pain was immediate, morphine was stopped, and some gain in weight ensued, but it was soon apparent that the limit of improvement had been reached, and operation was resorted to on February 11, 1903. The diagnosis before admission had favored cancer of the stomach. This, however, seemed ruled out by the long history, the absence of palpable growth, and the presence of hydrochloric acid in the gastric contents. Hence, cicatricial, nonmalignant obstruction of the pylorus, dating from ulcer thirty years ago, was diagnosed, and the operation planned was either a Heinike-Mikulicz plastic on the pylorus, or a gastrojejunostomy.

Just before giving the anesthetic thorough washing of the stomach was practised, and when as much of the irrigating fluid returned as would, the patient was elevated to the Trendelenburg position, and the tube gradually withdrawn. This thoroughly emptied the stomach, as was shown later when the organ was opened. Dr. Neck (*Centralblatt für Chir.*, December 27, 1902, "Zur Technik der Magenausspülung") has called attention to the value of the maneuver. With the patient upside-down the residuum of the lavage fluid gravitates to the top of the cardiac cone, and, as the tube recedes, flows out to the last drop. This is an important achievement, as we thus avoid: first, embarrassment and possible infection from fluid flowing out over the field

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

when the stomach is opened; second, the danger of self-strangulation by inhalation of vomited fluids; third, when the stomach is lifted during the manipulations any fluid it contains may gravitate up the esophagus and into the trachea,—not a fanciful peril by any means, as Dr. W. J. Mayo reports one death from this cause.

Under chloroform an incision was made from the ensiform cartilage to the umbilicus in the middle line. On opening the abdomen a hard cicatricial mass was felt at the pylorus, from which dense adhesions radiated to the structures about. The pylorus was thereby immobilised, and delivery of the mass through the wound prevented. The plastic operation of Heinike-Mikulicz was therefore rejected. It may be observed in passing that the usefulness of the ingenious device of Heinike-Mikulicz is now regarded as very limited. Unless the pylorus is movable, permitting the stomach to take a nearly perpendicular position, the organ is not drained satisfactorily, no matter how large a pyloric opening be made. Adhesions, if not present before, may form after operation, immobilising the pylorus in a high position, when the degenerated musculature of a chronically dilated stomach is unable to lift its contents to the opening (Mayo). Of 19 cases of pyloroplasty done by Mayo, 6 came to secondary gastrojejunostomy owing to failure to drain the stomach.

Accordingly, recourse was had to gastrojejunostomy. Again, referring to the experience of Mayo, which is probably greater than that of any other operator, it matters little whether the anterior or posterior anastomosis be made, provided the lowest point of the greater curvature be selected. I did the posterior operation, omentum, transverse colon, and stomach being held upward, and a hole torn in the mesocolon admitting to the cavity of the lesser omentum and the posterior wall of the stomach. The jejunum was then traced to its emergence beneath the ligament of Treitz, and stomach and gut united by a running suture of fine silk for $2\frac{1}{2}$ inches, a slit cut in stomach and gut, the two edges whipped with catgut, and the first mentioned silk suture completed around the front. This suture of the raw edges of the anastomotic opening must be thoroughly done, else the mucous membrane may adhere from side to side, permanently closing the opening. W. H. Brown (*Lancet*, July 7, 1901), reports a gastrojejunostomy which did well for two weeks, when obstruction recurred. On secondary operation, no cause being discovered outside, the stomach was reopened, when it was found that a membrane had formed across the anastomotic aperture. This was torn through, the stomach closed, and recovery followed.

The next and last step was a jejunojejunostomy by Murphy button. There has been discussion as to the need of this additional opening, and doubtless some cases have recovered without it. Its purpose is to prevent the so-called "vicious circle", a reflux of digested matters from the stomach into the afferent loop

of the duodenum, thence back into the stomach, and so on, over and over, leading to uncontrollable vomiting, exhaustion, and death. Probably dilatation of the duodenum from imperfect emptying of bilious, pancreatic, and other fluids also plays a rôle in this condition. But that the entry of bile into the stomach is the main element in causation, is denied for the reason that experimental anastomoses (Masse and Terrier), between gall-bladder or common duct and stomach, compelling the whole biliary secretion to traverse that organ, have not been followed by vicious circle.

That an opening between the two limbs of the attached jejunum is usually needful is evidenced by the experience of F. Franke (*Centralblatt f. Chir.*, No. 14, 1901), who lost a case by "circulus vitiosus", and found at autopsy that the enteroanastomosis had closed, the mucous membrane, which had not been included in the suture, having united across the opening, another illustration of the need of thorough suturing already mentioned. Mikulicz saved four out of eight cases of bilious vomiting by reopening and doing an enteroanastomosis, and Mayo had in three cases to do a secondary enteroanastomosis to relieve vicious circle. It is, therefore, doubtless wise to do this at the first sitting.

During the operation the patient breathed badly, but went to bed in good condition. Was nourished by rectum till fourth day, when peptonised milk was begun. Eggs were added on the seventh day. The appetite became enormous and virtually insatiable, and weight was put on rapidly. He returned to his home five weeks after operation, the Murphy button having never been found in the passages. He now weighs 165 pounds, eats a generous and varied diet, and has done farm work, plowing, haying, and the like, all summer.

Not many advances have been made in gastric surgery that have not been noticed in the exhaustive articles by Weir, Keen, Frazier, and Bevan. (Weir: on the operation of gastroenterostomy, combined with enteroanastomosis, *N. Y. Med Record*, April 16, 1898. W. W. Keen: Cartwright lectures on surgery of the stomach, *N. Y. Med. Jour.*, May 7, 1898. Chas. H. Frazier: surgery of the stomach, *Amer. Jour. Med. Sci.*, May, 1900. A. D. Bevan: surgery of the stomach, *Jour. Amer. Med. Assoc.*, January 24, 1903).

I find only the following points to bring to your attention. In the *Annals of Surgery*, November, 1902. Fowler describes a method of his own to prevent the occurrence of "vicious circle." He encircles the afferent jejunal arm with silver wire just tightly enough to occlude, but not to cut it, thus preventing duodenal contents from entering the stomach, or vice versa. I cannot, however, discern wherein this modification differs from that pro-

posed by Chaput, except that the latter used silk where Fowler uses wire, and tried to make his opening between stomach and bowel a valvular one.

The plan of Max Rutkowski is winning some favorable comment. (*Centralblatt f. Chir.*, No. 39, 1899.) It consists in doing a Witzel or Kader gastrostomy, in addition to the gastroenterostomy. A tube is then introduced from outside into the stomach, and thence through the anastomosis into the efferent jejunal limb, where Witzel thinks it should be made fast with catgut. This permits immediate and continued feeding into the bowel, a great advantage in cases weakened by starvation, and it lessens post-operative vomiting. Hammesfahr (*Zeitsch. f. Chir.*, June 6, 1903), reports 13 cases so treated with no deaths, and no vomiting following operation.

Witzel claims to have been doing this operation independently, and names it gastroenterostomosis externa.

Doubtless the most noteworthy recent addition to the technique of gastroenterostomy was that of McGraw. (Gastroenterostomy by the elastic ligature., *N. Y. Med. Jour.*, January 26, 1901). Dr. McGraw does not claim originality for the idea, which he credits to Gaston, of Atlanta, (1884), and Bardenhauer, (1888). Modlinski, of Moscow, at the sitting of the *Deutsche Gesellschaft für Chirurgie*, April 5, 1899, refers to a number of experiments by different surgeons in the use of silk ligature in effecting gastroenterostomy. Of these Podres's plan to connect stomach and bowel by two silk ligatures at right angles, attracted most notice. It was found, however, that no permanent opening followed this method, the silk embedding itself in the tissues, which healed over it as fast as it cut, till it eventually remained buried. So Modlinski proposed the rubber ligature to replace silk, his technique being in all respects similar to McGraw's, and reported nine successful experiments on dogs. But McGraw was the first to do this operation successfully on man, and since his publication the method has found wide acceptance, and in view of its simplicity, and rapidity of execution, doubtless has a brilliant future. (For excellent illustrations of the steps of McGraw's operation, see *Jour. Am. Med. Assoc.*, January 17, 1903).

Mortality.—In 121 gastroenterostomies for nonmalignant pyloric obstruction, Mayo reports 8 per cent. of deaths, and 30 per cent. in malignant cases. Bevan found that 190 malignant cases (combining those of Rydygier, Kronlein, Maydl, Kocher, Czerny, Morrison, Mayo, and his own), gave 50 deaths, or 26 per cent. mortality. Of the 140 recoveries, only 17 lived more than three

years, and some of these with recurrences. So, only 5 per cent. were really cured.

But in benignant stenosis of the pylorus gastroenterostomy, combined with enteroenterostomy, now holds undisputed pre-eminence as a life saving and health restoring operation.

Squint and its Modern Treatment.¹

By F. PARK LEWIS, M. D., Buffalo, N. Y.

THERE is, perhaps, in ophthalmology no more simple, and at the same time no more difficult subject than that of strabismus; simple, because its correction is most easy, requiring merely the division of a superficial tendon, an operation any surgeon can perform; difficult, because a simple tenotomy, if not considered in connection with the conditions that have caused the squint, will be followed untimely and almost inevitably by a state worse than that which it was designed to correct.

When we remember that a permanently inturned eye becomes at last blind, we have a reason additional to the obstrusive deformity for applying the wisest measures for its relief, at a period when help may yet be afforded. To understand the nature of squint we must know the process by which binocular vision is obtained, and although it may seem elementary it will make our subject more clear if we consider for a moment how we see.

Of course, paradoxical as it may seem, we do not see with our eyes. They are the media merely through which the impressions made by light waves, are carried to the visual center in the brain. Our eyes are two cameras by which the object seen is photographed by a mechanism and a process almost exactly analogous to that employed in the artist's studio. Indeed, the impression has been "fixed" on the retina as it is on the chemically prepared plate and plainly seen after the tissue has been removed from the eye. For every nerve ending in the retina is a corresponding terminal neuron in the cuneus, and as there is a macula, or central point of keenest vision in the eye, so there must be a corresponding *brain macula* or receptive point of greatest acuteness in the cerebral cortex. The impression made by the picture upon each retina is carried to both sides of the cerebral hemispheres, but in unlike degree as the temporal field in each eye is the greater. There is consequently an exact over-lapping

1. Read before the Batavia Medical Club, July 1, 1903.

of the impression of the image carried from each eye to each side of the brain.

It will be seen then that in order that there be perfect correspondence between the impressions on each visual cortex, there must be perfect harmony between the two mechanisms by which these impressions are focused. The human eye, almost immediately adjusts itself to any focal range within its possibilities. This is not accomplished by means of a screw as in a camera, but by, at least, eighty muscular processes constituting the ciliary body,

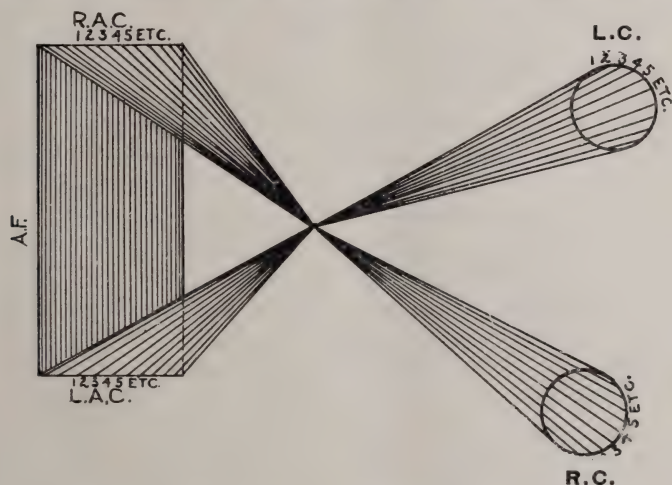


FIG. 1. LEWIS—DIAGRAMATIC SKETCH OF THE CORRESPONDING NUCLEAR AND CILIARY NEURONS.

R. C.—Right ciliary region. L. C.—Left ciliary region. 1, 2, 3, 4, 5, etc.—Neurons governing corresponding accommodative ciliary fibers. R. A. C.—Right center for accommodation. L. A. C.—Left center for accommodation. A. F.—Association fibers connecting corresponding nuclear neurons.

and these are each again subdivided into individual fibers, so that there are certainly as many single living chords controlling the focus of the lens, as there are degrees in a circle.

The center for accommodation has been located as a part of the group of cells, constituting the nucleus of the third nerve. As it has been shown that these ciliary elements act synchronously, there must be nuclear origins for each fiber, and consequently the center for accommodation is not a point but a multitude of neurons. (See Fig. 1).

The various parts, therefore, of the mechanism of vision are so interrelated that to work harmoniously they must be anatomically symmetrical and normal. If one eye is too short in its long

axis, as occurs in hypermetropia, or if it is too long, as in myopia, or if the axes are incommensurate, as in astigmatia, or if the eyeballs themselves are unsymmetrical as in anisometropia, or as it is essential that the visual axes shall be both directed toward the object observed, if the muscles are in a state of imbalance as in heterophoria, then the effect exerted upon the delicate muscle fibers, in an endeavor to correct by adjustment that which is organically wrong, may disturb the harmony of action and affect both the visual centers as well as centers associated with them.

Now the infant does not possess at birth the function of binocular fixation. The eyes roll aimlessly for the first six weeks of life and only gradually acquire the power of working coördinately. The complete power of fusing images has usually been acquired by the sixth year according to Worth¹, whose recent book is the most valuable contribution to this subject for many years, and to whom I am indebted for many of the important conclusions which I shall endeavor to outline in this paper.

Among all of the complicated and accurately balanced co-ordinate actions, there are none in which a nicer adjustment is required than in that of seeing. It is first necessary that the cortical center governing the muscles of the neck be energised in order that the head be lifted to the right angle and turned in the proper direction toward which the eyes are to be directed. If the object is within a short range the center for convergence must cause the internal recti to pull the eyes in exactly the position that will make the visual lines cross in the plane of the object to be seen. Meanwhile the externi are holding the balance as guy ropes in order that the convergence be not excessive. In any slight rotation the obliques are working as pairs or antagonists. Coincidentally the accommodative centers, which as has been shown, have a hundred or more inter relationships, cause the ciliary muscle to give the exact degree of curvature to the lens to bring the focus upon the desired point.

That these involved actions may be performed at the same time or in rapid succession as may be desired, each of the centers must be directly connected by means of association fibers with each of the others and the combined activities produce the function of fusion. That is to say, a stereoscopic effect is produced by the impressions of both eyes being superimposed in the cortex of each cuneus so exactly that as undoubtedly the cortical neurons are also connected, the sensation is excited in the brain of a single image and we have binocular vision with perfect fusion of the images.

1. Squint—Its Causes, Pathology and Treatment. By Claud Worth, F. R. C. S., 1903.

If, however, as frequently happens, the mechanism by which the two foci are produced is not alike, the images are not then superimposed nor produced with equal clearness. One camera,—one eye,—may be longer or shorter in its focus than the other, or the radii of corneal curvature may be greater or less in one meridian than in the corresponding meridian of the fellow eye. The images will then be unlike on the retinae and the impressions uneven on the cuneus cortex. In that hemisphere, therefore, corresponding to the defective eye the impression is dull. Greater effort is made by the centers governing accommodation to get a clear impression and, as accommodation and convergence are produced together, the eye turns in. Fusion is imperfectly accomplished if at all. As a muscle which is not used soon ceases to retain its function, so an eye, or the visual center rather with which the eye communicates, ceases to have the power to see.

Worth insists that if this fusion function is not restored before the sixth year, vision never is regained and the faculty is permanently lost. That this is not absolutely true is shown by the fact that sight does measurably improve under training at a later age than this; but it is, nevertheless, true that with each year after the squint becomes established, the difficulties are increased and the possibilities are limited.

The pernicious teaching which one yet occasionally encounters, advising delay in the correction of a squint until the child has arrived at an age at which adequate tests may be made and glasses worn, or the yet worse advice that the deformity "will be outgrown" cannot be too strongly deprecated. By means of objective methods, notably the shadow test which is exceedingly trustworthy and the ophthalmometer, with the aid of the ophthalmoscope, an exact determination of the refraction can be made in an infant and measures should be at once undertaken to correct the existing defect on which the squint depends.

The first requirement may be to use a cycloplegic in the better eye. This measurably throws that eye out of commission and compels the use of the defective and squinting one. The refraction should be at once corrected; glasses may be worn by a very young child and the relief is great and immediate. To train the fusion faculty Mr. Worth has devised an immensely practical and useful instrument which he calls the amblyoscope¹. It consists of two-hinged tubes so arranged with mirrors that binocular vision may be obtained when the visual angle has a convergence of 60 degrees or a divergence of 30 degrees. It is therefore, possible if poten-

1. See Fig. 2, p. 252.

tial fusion exists to bring the visual axis together and after correcting unequal refraction to compel the defective eye to make the effort to see.

It is astonishing how rapidly an amblyopic eye may be trained to a point of normal visual acuity by this method, and a defect that must otherwise soon become permanent and established be overcome.

The conclusions therefore, are:

1. That no period is too early for the recognition and attempted correction of a threatened or imminent squint.



FIG. 2. LEWIS—WORTH'S AMBLYOSCOPE.

For developing fusion function and improving visual power in young amblyopic eyes.

2. That when recognised, refractive differences should be adjusted at the earliest period at which glasses may be worn.

3. That fusion training should be at once employed under the direction of the surgeon, in order that incipient or established amblyopia may be corrected before the defect becomes fixed and incurable.

4. That surgical intervention should be undertaken as soon as its necessity becomes established, and should consist of tenotomy or advancement or both, at such a time as will permit perfect fusion, if correction with glasses and fusion training by the amblyoscope will not suffice to correct the existing deformity.

454 FRANKLIN STREET.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

Section on Medicine.

REPORTED BY WM. IRVING THORNTON, M. D., Secretary.

THE regular meeting of the Section of Medicine of the Buffalo Academy of Medicine, was held in the Academy rooms, Public Library Building, Tuesday, September 15, 1903. The meeting was called to order at 8.45 p. m. by the chairman, DR. ARTHUR W. HURD.

DR. GEO. E. FELL presented a paper entitled,

LAKE AND RIVER CURRENT OBSERVATIONS AND THEIR VALUE TO
OUR CITY.

The occasion for this investigation was the epidemic of typhoid fever at the Steel Plant district, which is drained by Smokes Creek, whose waters, it was feared, polluted Buffalo's water supply; also for the reason that a new intake pier at the Horseshoe Reef was being contemplated.

A number of floats were placed in the lake, one a mile out from Smokes Creek; others at various positions outside the breakwater, one of the latter being one thousand feet west of the red light. The first passed between the breakwalls into the inner harbor. The latter floated down the river, 320 feet east of the intake pier; another float started at a point at the intersection of the projections of Jersey Street and the old breakwall and passed into the intake pier. This point, however, in the judgment of the essayist, was too far out to be contaminated by Smokes Creek. He, therefore, concluded that Buffalo's water supply was not endangered because of typhoid at the Steel Plant.

DR. A. L. BENEDICT read a paper entitled,

THE HAMBURG FILTER PLANT AND FILTRATION OF WATER IN
HOLLAND,

giving an outline of the construction of the filter plant and method of cleansing the same.

In discussing Dr. Fell's paper, DR. HOPKINS said we should consider that Lake Erie is very superficial, and that there are many special currents differing from the general currents, as observed by the essayist, which might cause the water from Smokes Creek to contaminate our city water. While he believed that part of the water passed between the breakwalls into the inner harbor,

he did not consider it possible for the entire volume to do so, as stated by Dr. Fell; and, therefore, did not believe the observations were conclusive.

DR. W. D. GREENE stated that the colon bacillus, which indicates contamination, had not been found in Buffalo's water supply for ten years previous to 1903, and that last year there was 45 per cent. more typhoid than usual. He stated that the water supply at the present time was good.

DR. BISSELL sent word that he was unable to be present and discuss Dr. Fell's paper.

DR. BENEDICT believed that the reason we did not have a severe typhoid epidemic in the spring of this year was because we did not have the extensive freshets to wash the sewage from Smokes Creek far out into the lake, and also because there was a sand bar across the mouth of the creek.

DR. EUGENE WASDIN stated that there was an irresistible hydrostatic pressure forcing the superficial waters of Lake Erie through the openings in the breakwalls towards Buffalo's shore. He believed Dr. Fell proved his case.

DR. A. W. HURD suggested that the banking up of ice at the breakwall, during the winter, might deflect the general currents.

DR. P. W. VAN PEYMA stated that a greater number of floats should have been used. He did not believe the observations were conclusive.

DR. JEWETT asked for an explanation of the discoloration, occasionally seen far out in the river.

DR. FELL stated that this was due to a disturbance of the silt at the bottom of the lake and river, due to a storm.

DR. E. E. BLAAUW made some remarks relative to the Hamburg filter plant.

The meeting adjourned at 10.30 p. m.

Fellows present, 24.

Stated meeting held October 6, 1903.

REPORTED BY E. A. BOWERMAN, M. D., Secretary.

The meeting was called to order at 8.45 p.m., by the president, DR. JOSEPH W. GROSVENOR.

The minutes of the last stated meeting held May 26, 1903, and special meeting held September 8, 1903, were read and approved.

The council recommended to the Academy the election of the following: Drs. E. J. Kiepe, Joseph Burke, Joseph Spangenthal,

William J. O'Donnell, Robert E. De Ceu, James A. McLeod, John Chalmers, James H. Carr, Nelson G. Russell, P. H. Hourigan and Richard J. Gould.

On motion, the secretary was instructed to cast a ballot for their election. They were declared elected.

Dr. M. HARTWIG presented a case of a large cystic tumor over the left eyebrow, from which mucoid material could be pressed into the nose. This was thought to communicate with the ethmoidal or frontal sinuses.

Dr. MARSHALL CLINTON presented a case of acute intestinal obstruction, due to an inflamed Meckel's diverticulum in which a portion of the intestine had been resected.

Dr. EUGENE A. SMITH read a paper in which he reported three cases of cerebral compression, due to traumatic extradural hemorrhage, resulting from fracture of the skull, in which surgical intervention had resulted favorably.

Dr. M. HARTWIG presented a similar case in which there had been both extra- and intradural hemorrhage, with recovery after operation. These cases were discussed by Dr. James W. Putnam.

Dr. ROSWELL PARK reported two anomalous cases of gangrene of the entire large and small intestine. In each case the trouble developed suddenly without apparent cause, the patients being, before the onset of symptoms, apparently healthy and about their usual vocations. The symptoms were intense abdominal pain of a few hours duration, followed by vomiting, collapse and abdominal distention, the pathology being either an embolism of the mesenteric arteries or thrombosis of the mesenteric veins. One patient lived about 24 hours after the onset of symptoms; the other about 5 days. These cases were discussed by Drs. Blaauw, Benedict, Howell and Rooth.

Dr. CHARLES S. JEWETT, the chairman of the membership committee, urged the coöperation of the members in increasing the membership of the Academy.

Adjourned at 10.15 p.m. Attendance, 54.

Medical Society of the County of Erie.

Special meeting held October 10, 1903.

REPORTED BY A. L. BENEDICT, M. D., Acting Secretary.

The president, Dr. ERNEST WENDE in the chair.

Dr. A. L. BENEDICT was appointed secretary pro tem.

Dr. LUCIEN HOWE explained that the object of the meeting was to consider the advisability of memorialising the Medical

Society of the State of New York, in reference to the resolutions passed at the recent meeting of the New York State Medical Association, favoring a union of the two state organisations.

It was moved by Dr. De Lancey Rochester, Dr. Henry Reed Hopkins seconding, that it is the sense of this county society, that the medical profession of the state should be united in one body. Carried.

It was moved by Dr. Hopkins, Dr. Rochester seconding, that a copy of the above resolution be transmitted under the signature of the officers of the meeting and the seal of the society, to the officers of the Medical Society of the State of New York, before its meeting, next Tuesday, October 13, 1903. Carried unanimously.

On motion of Dr. Hopkins, the meeting adjourned.

Medical Society of the State of New York.

Special Meeting, Tuesday Evening, October 13, 1903.

(From the Medical Record.)

THE UNIFICATION OF THE PROFESSION.

A special meeting of the Medical Society of the State of New York was called for the evening of October 13, for the specific purpose of taking steps towards bringing about a union of the two state medical organisations. A good opportunity to secure a large and representative attendance was afforded by the fact that the semiannual scientific meeting of the society was held on the same day.

The large hall of the New York Academy of Medicine was filled with an eager and expectant throng when, at exactly half-past eight o'clock, the gavel fell. If there were any present who feared the audience on this occasion might not be as truly representative as the important business to be transacted demanded, they must have had their fears quickly dispelled on seeing, not only the familiar faces of many eminent members of the local profession, but a goodly proportion of active workers and recognised leaders from distant parts of the State.

On calling the meeting to order, the president, Dr. A. T. Bristow, of Brooklyn, said:

Gentlemen of the Medical Society of the State of New York:

Almost two years ago the Medical Society of the State of New York, acting upon the recommendation of the president, Dr. Henry L. Elsner, authorised the appointment of a committee

for the purpose of promoting a union between the state society and the state association. On request of our society, the association appointed a similar committee. Meetings of two committees were held from time to time until, in October, 1902, at this annual meeting, the association adopted resolutions placing restrictions upon its committee from which it could not deviate. At this time, also, the uncertain condition of the Code of the American Medical Association rendered the position of our committee difficult, for no one seemed to know its exact status. The clause, which was so objectionable to the state society, remained unchanged. An additional obstacle was the request of the association that the two societies apply for a new charter. In the course of time, under the resolutions referred to, the committee of the association went out of existence.

At the May meeting of the American Medical Association the clause of the old code, which had caused the division of many years ago, was stricken out entirely, and it was clearly stated that the new "principles of ethics" were merely advisory, and not obligatory on state bodies.

Your conference committee, recognising the fact that a most serious obstacle to the wish for union had been swept aside, requested the association to name a new committee to the end that fresh efforts might be made to close the gap. Informal conferences developed the fact that a reasonable compromise could be obtained by which the wish of the association could be complied with, and that some legal recognition be taken of the new order of things without in any respect sacrificing the continuity of our charter.

At a special meeting of the Council and Fellows of the association, the resolutions were unanimously passed which were printed in the notice of this special meeting (*Medical Record*, October 10, page 581), and a new committee was appointed.

I ask you to notice that these resolutions contain but a single restriction, *i. e.*, that the reorganised society shall be called The Medical Society of the State of New York. (Applause). In all other respects the new committee of the association is absolutely untrammelled, and has been appointed with power.

The request is made that your present committee be given similar power. This is the question which you are called upon to decide tonight. The association has reposed full trust and confidence in its committee for the purpose of furthering that union which, two years ago, The Medical Society of the State of New York expressed its anxiety to bring about.

It now remains for the society, which made the original proposition looking toward peace, to say whether it will have peace and bring to a happy termination a conflict which has lasted almost a quarter of a century.

I will ask Dr. Curtis to read the communications of the association.

The secretary then read the resolutions which have already been printed (*Medical Record, Ibid.*). They were received with hearty applause.

Dr. D. B. St. John Roosa then said:

Mr. President, and Fellow-Members:

As one of those who has lived long enough to see the beginning, and I hope will live long enough to see the ending of this controversy that has been carried on so long, I have the pleasure of offering the following resolution, which, I think, will have the vote of every member of The Medical Society of the State of New York:

Whereas, The New York State Medical Association, at a recent special meeting, duly assembled, has, by unanimous vote, appointed a committee with full power to meet with the similar committee of the Medical Society of the State of New York to arrange for the unification of the two organisations under the corporate name of The Medical Society of the State of New York; therefore, be it

Resolved, That the committee of conference of the Medical Society of the State of New York, already appointed, be given power equal to, and commensurate with the powers recently granted the committee created by the New York State Medical Association for the purpose of unifying the two State Medical Societies into the Medical Society of the State of New York.

Dr. Willis G. Macdonald, of Albany, said:

Mr. President and Gentlemen of the Medical Society of the State of New York:

I rise in my place to heartily second the preamble and resolution presented by that distinguished fellow of this society, Dr. Roosa. (Applause.) The Medical Society of the State of New York has seen many glorious occasions. There are numerous notable instances in its long history of value to the American medical profession—its notable relation to the very organisation of the American Medical Association; its later relations in the discussion of the very subject matter which has separated us in the State of New York for so many years; its more intimate relations with the medical education and the adoption of a method in this state which has been the pattern of many others. Again, and perhaps the most notable occasion—the best work of this society—presents itself now on this occasion. It shows you, Mr. President, that the medical profession, besides being learned, is also great; it shows you, Mr. President, that physicians can forget their differences; and that we are no longer the by-word of the world; it shows you, Mr. President, that now we are able to agree and sit down together in unity; it shows you that with the carrying

of this motion men are able to forget and to forgive; it shows you that it is possible for us at this time to so meet together that we can settle all of our differences upon a very easy and very beautiful plan. (Applause.)

Gentlemen, this is the most delightful occasion which I have ever known in the history of the Medical Society of the State of New York, and, as I have already said to you, I leave it to you if it is not the most important in its entire history.

Gentlemen, we stand at the beginning of the twentieth century,—on the very threshold of it,—with all the progress that has gone before, with all the attainment in a science of the immediate past, only to look forward as the unified profession to our greater opportunities, and to the greater necessities and to the greater honors of the future.

Mr. President, it is my pleasure to again second this resolution.

The resolution was read again by the president. It was adopted, without a dissenting vote, amid cheers and prolonged applause, and the adjournment of the meeting was followed by hand-shakings and general congratulations. Whatever may be the final outcome, no one who witnessed the unmistakable evidences of rejoicing and good fellowship exhibited after the adjournment of this memorable meeting could fail to be impressed with the fact that many of the old contentions had become dead issues, and that the rank and file of the profession, at least, were weary of bickerings and petty politics, and anxiously awaited the time when they would be relieved from this thralldom and could follow untrammelled those lines which were more in keeping with the seriousness and dignity of their noble calling.

PROGRESS IN MEDICAL SCIENCE.

Obstetrics and Gynecology.

CONDUCTED BY MAUD J. FRYE, M. D., Buffalo, N. Y.

LONG-CONTINUED FUNCTION OF THE MILK GLANDS.

NUSSBAUM (*Munchener Medicinische Wochenschrift*) reports in his practice two cases of persistent secretion of milk for one or more years after the discontinuance of nursing, resulting in making the woman weak and nervous. Both patients were suffering from malposition of the uterus, accompanied with endometritis and fluor albus. The treatment in both was similar, consisting of a pressure bandage over the gland, the use of a mild aperient,

and repeated doses of antipyrin to the limit. This soon caused a cessation of the milky secretion with an improvement of the accompanying symptoms. The writer quotes another case from Zeitlin in which the function of the milk glands persisted for five years; the interesting feature in this case was the atrophy of the uterus after a dry metritis associated with amenorrhea.—Abstract in *American Medicine*.

THE IODINE TREATMENT OF PUERPERAL SEPSIS.

PRYOR (*New York Med. Jour.*, August 22, 1903.) relates the results in thirty-seven cases operated on by him for puerperal sepsis. Twenty-seven had not been previously operated upon. Of these one died. Ten had been curetted and of these three died. In 36 of the 37 cases streptococci, generally mixed with other germs were found in the uterine cavity, and in all the cases streptococci were found in the serum or lymph, or free pus in the cul de sac. Pryor's method consists in curetting the infected uterus and opening broadly the posterior cul de sac, packing both with iodoform gauze. The almost uniformly favorable result secured he believes to be due to the liberation of free iodine from the iodoform gauze. The sterilisation of the pelvis was demonstrated to take place by the second or third dressing and the urine showed the presence of iodine in the circulation. In all cases either enteroclysis or intravenous infusion of normal salt solution was practised.

THYROIDS IN MAMMARY INACTIVITY.

BARNES (*Medical News*, October 10, 1903,) in an article on advances in therapeutics in pediatric practice, relates several cases in which the administration of thyroid extract before confinement and during lactation resulted in an abundant milk secretion in women who following previous confinements had been unable to nurse their offspring.

DANGERS OF UTERINE CURETMENT.

VAN DE WARKER (*New York Medical Jour.*, October 10, 1903.) emphasises by the recital of a number of disastrous cases which he has seen in consultation practice, the dangers of uterine curetment. He dwells upon the need for thorough cleansing of the vagina and vulva. He regards Sims's position as the best for the patient, as in it the vagina is ballooned out and can be perfectly cleansed. He cautions against the use of the branching dilator

and advises instead the graduated sounds. The sharp curet he regards as dangerous as a high explosive. In the majority of cases he believes the dull curet answers every purpose. The irrigating curet he condemns. Instead of the irrigation he advises wiping the uterus out with sterile cotton. Firm packing of the uterine cavity should never be done. Nothing more than a slender strip of gauze should ever be used.

BACTERIOLOGY OF THE PUERPERAL UTERUS.

MARX (*American Jour. of Obstetrics*, September, 1903,) discusses the following problems: (1) Is the puerperal uterus a sterile organ? (2) In what way does a uterus free from bacteria influence or assist us in diagnosing a non-septic condition? (3) As a result of these investigations how is our treatment of the parturient state to be influenced?

Fifteen puerperal women were examined by means of culture tubes, 48 bacteriologic tests being made altogether, the observations being begun on the day of labor and extending through the first 5 or 6 days of the puerperium. He concludes that the puerperal uterus is a sterile organ. The presence of bacteria in the puerperal uterus in the absence of general evidence of a constitutional disturbance, such as fever and pulse rise, and the like, means the introduction of such bacteria by accidental contamination.

The presence of bacteria in the puerperal uterus accompanied by fever, rapid pulse and other disturbances means in all probability a sepsis arising from the uterus. The absence of bacteria in the presence of general symptoms indicates the necessity of looking for the source of the disturbance in some organs other than the uterus—sepsis from vagina or vulva or some other general disturbance independent of the puerperal condition. Practically he feels that a systematic examination of the contents of uterus from the standpoint of bacteriology is a very useful procedure, whose field of application is very small—limited to those few cases in which one is unable to make a diagnosis by other means, and further limited to those cases in which the cultures can be made by one who is an expert in this line of work.

The vagina and uterus being normally sterile, Marx argues that in the healthy woman the only part of the genital tract needing preparation for labor is the vulva. When the asepsis of the operator cannot be questioned no uterine or vaginal douche is necessary or advisable either before, during or after labor.

On the other hand, when the vaginal secretion is alkaline, pro-

fuse, malodorous and purulent, which in most cases means a gonorrheal infection, profuse and repeated douches are given before labor, and when labor sets in, if the discharge is still not normal, surgical scrubblings, such as are done before a major vaginal operation are indicated. When in these pathological cases labor is prolonged, vaginal douches are administered at short intervals.

He does not believe in the use of gloves, depending instead on thorough hand disinfection.

Marx believes that even in cases of known infection uterine douching is of no service in eliminating infection, and he instead advocates the firm packing of the uterus with iodoform gauze.

Genitourinary and Syphilitic Diseases.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE SURGERY OF THE PROSTATE FROM THE STANDPOINT OF PERSONAL EXPERIENCE.

GRANVILLE MACGOWAN (*New York Medical Journal*, June 13, 1903), discusses the radical surgery for relief of urinary obstruction by encroachment of the chronically inflamed prostate. He does not believe that "once a prostatic always a prostatic."

Speaking from personal experience in nearly a hundred cases, the author states no man who is prostatic, unless the disease be cancerous, need feel that he has a disease of which there is more risk to his life by surgery than otherwise. Many cases can be entirely cured. The tonicity of the bladder may be restored by removal of the obstruction. The kidneys functionate normally after the removal of the obstruction. The lagging mind, the dragging step, the rebellious stomach, the pallid cheek, and the sexual power are restored by surgical relief of urinary obstruction.

Belfield, of Chicago, was probably the first to deliberately plan and execute prostatectomy. Prostatectomy is a shelling out or excochleation of the gland either through a perineal or suprapubic opening. Posture of the patient is more important and of greater assistance than any of the devices suggested for traction. The posture referred to is exaggerated lithotomic and the abstractor would still improve this position by raising the body from the hips up, to an angle of 20 degrees from the horizontal line.

Sometimes these tumors are so dense and adherent that they must be removed piecemeal with rongeurs or serrated scissors,

guided by the index finger. This procedure is very tedious and bloody sometimes, yet very satisfactory in results.

When the obstruction to urination becomes so great as to demand frequent or regular catheterisation, surgical interference is in order. The catheter is a constant menace to life, for in spite of all warnings and care, urinary infection comes about in the majority of cases, a condition worse than any hazard of operation. No one is too old for these operations. Successful Bottini operations and successful prostatectomies have been done upon men who have passed the age of 80.

Albumin and casts in the urine, stone in the bladder and weakness are not contraindications to operation. Pus, blood, albumin in limited quantities, extreme age, sickness, feebleness, within reasonable limits or septic symptoms do not prohibit operation.

There are three contraindications to operation: (1) a tendency to bleed from very slight injuries; (2) serious heart lesion, accompanied with great muscular weakness; (3) and most important, is urinary insufficiency.

Even in a deficiency of kidney action, a bad pyelitis, or great feebleness, a Bottini operation may be done for immediate relief, followed subsequently by a prostatectomy. A scar left after galvano cautery does not seriously interfere with prostatectomy. If the structure be cancerous the Bottini is the operation of choice, and carried out through a perineal section.

Some authors teach that all prostatectomies should be done through the suprapubic route, others through the perineal. If the tumors be fibroid or myomatous and located high, they can not be removed through the perineal opening; they can not be peeled out; they can only be taken piecemeal by rongeur. Adenoid nodules will peel. If the outer capsule of the prostate or the neck of the bladder is not torn, the hemorrhage will not be serious. Sclerotic arteries or rupture of enlarged veins may lead to severe hemorrhage, which may be controlled by the use of water at 120° F. The perineum, scrotum and buttocks should be protected by vaseline, or the wound packed with gauze, moistened with a solution of 1 to 1000 of adrenalin chloride. The gauze should be carried into the capsule. Give two quarts of normal salt solution by enema every three hours until secretions come free.

CYSTITIS IN THE FEMALE.

CHARLES D. LOCKWOOD (*Southern California Practitioner*), April, 1903,) states that four distinct types of vesical inflammation have come under his observation in gynecological practice:

(1) irritable bladder—this form occurs in young, unmarried and fat, sluggish women. Symptoms are frequent smarting and burning micturition. Urine normal, no pus, no blood. The cystoscope shows hyperemia of the trygone. The urethra is congested and hyperesthetic. Urine often excessively acid. These cases must be differentiated from true cystitis by chemical and microscopical examination and inspection of the bladder. The second group of cases are due to infection by pus forming microbes, such as the colon bacillus, proteus albus, staphylococcus and streptococcus. The infection reaches the bladder by the urine, by unclean instrumentation and by penetration of the tissues from neighboring inflammation and abscess. Retention and decomposition of urine are the most common predisposing factors in causing this malady. Retention is often due to cystocele. This group is the most amenable to treatment and the most common. Diagnosis is made by physical, chemical and cystoscopic examinations. The third group is due to tubercular lesions; the fourth variety is due to gonorrhea.

ABSTRACTS.

Improved Method of Local Analgesia.

ARTHUR E. J. BARKER, F. R. C. S., Eng. (*Lancet*, July 25, 1933), says he has employed local analgesia for surgical operations of considerable magnitude during the past five or six years, and has little doubt of its future when the principles which underlie it are well understood. The dangers associated with the injection of cocain appear to make it unsuitable for local analgesia in the larger and longer surgical operations. Prof. Barker has abandoned it in favor of beta-eucain, which is less dangerous and gives the most satisfactory results.

The great difficulty with local analgesia in extensive operations has been the inability to render the whole field analgesic, though up to three grains of beta-eucain (100 ccm. of a 2-1000 solution) may be injected, as ordinarily the effects of the injections pass off in about twenty minutes. Having recognised this and other drawbacks, he was very much interested in Dr. Braun's observations on a method of overcoming them by the combined use of beta-eucain with adrenalin. He has since used this method with great satisfaction. It is based on an old experience that anything which retards or diminishes the circulation of the blood in a part infiltrated with an analgesic, enhances the potency of the latter.

Prof. Barker prepares his analgesic solution as follows: 3 grains of beta-eucain and 12 grains of pure sodium chloride are added to 3½ fl. ozs. of boiling distilled water, and 16 drops of a 1-1000 solution of adrenalin chloride are poured into the fluid after it has cooled. This makes a normal saline solution containing 2-1000 eucain and 1-100,000 adrenalin chloride. The whole quantity could, within the limits of safety, be injected into a patient at one sitting; but Barker has found that an extensive operation can be done with about one-half of it.

The author then describes the radical cure of an inguinal hernia. Due regard must be taken of the position and course of the nerves supplying the structures to be dealt with, and in injecting around or into the nerves the aim should be to make each area of diffusion overlap the preceding one. Of course what is possible in the groin, which is proverbially sensitive, ought to be equally so in other parts.

Barker never observed secondary hemorrhage following the use of the method. He used it in 34 cases, which included 10 operations for radical cure of hernia, 5 cases of strangulated hernia, 2 castrations for tuberculous testis, 5 cases of varicose veins, 6 cases of psoas abscess, 1 case of loose body in the knee, 1 case of tumor of the neck (actinomycosis), 1 colotomy, 1 of Thiersch skin grafting, and 2 cystic adenoma of thyroid. The analgesia was always satisfactory and far exceeded in completeness and comfort all other procedures. Care must be taken to see that the adrenalin solution has not become inert by exposure to air or contamination with an alkali.

OPERATION FOR FRACTURE OF SPINE.

JOHN B. MURPHY (*Am. Jour. Surg. and Gynecol.*, September, 1903,) says that when there is fracture with primary complete transverse paralysis, operation will do no good.

When there is irregular paralysis, even though it may eventually become complete, recovery usually occurs without operation. When the paralytic symptoms are evidently due to hemorrhage operation is indicated; but it must be done at once. If the paralysis can be ascribed to mere puncture of the cord or to simple pressure of fragments, operation is justifiable; but such cases must be extremely rare.—*Medical Age*.

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M. Sig.—A teaspoonful every two to four hours.

BUFFALO MEDICAL JOURNAL.

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No. 4.

Unification Close at Hand.

THE Medical Society of the State of New York took initiative action, relating to medical unity at its annual meeting, held at Albany in January, 1902, by authorising the appointment of a committee of conference, in accordance with the recommendation of President Elsner in his inaugural address, the part of which pertaining to that subject, reading as follows:

That the Medical Society of the State of New York appoint a committee of five, to confer with an equal number representing the New York State Medical Association, for the purpose of formulating a plan which shall have for its object the reorganisation of the regular profession of this state, which body shall be in affiliation with the American Medical Association, and that the committee report the result of its labors at the next meeting of the Medical Society of the State of New York. In the event of failure of the New York Medical Association to appoint such committee, or if the committee should fail to agree upon a plan of reorganisation, the committee appointed by the Medical Society of the State of New York shall have full power, if it deems it expedient, to represent this society before the American Medical Association, and the secretary of this society shall, if the majority of the committee desire, provide the individual members with credentials to represent this society in the American Medical Association.

The committee thus created pursued its labors during the year 1902, in conference with a similar committee of the New York State Medical Association, and at the annual meeting of the Medical Society of the State of New York, held in January, 1903, reported the results of its labors in detail to the latter society. The report concluded as follows:

In reporting progress your committee wishes:

1. To file its objection to any method of reorganisation which shall in any way interfere with the life of the Medical Society of the State of New York. Therefore, we are opposed to any legislative act in connection with the amalgamation of the medical profession of the State of New York. The opinion of Judge Andrews makes it clear that no such action is necessary.

2. Your committee having been assured that the old code of ethics of the American Medical Association is still in existence, does not feel that it is within its power to recommend that action be taken by the Medical Society of the State of New York, until the American Medical Association shall make it possible for the Medical Society of the State of New York to subscribe to its constitution and by-laws and written rules of order, consistently, without the sacrifice of principle.

3. The methods of gathering data which shall serve to formulate a plan of organisation ultimately to be presented to this body for approval, must be evolved after further conference and greater consideration than your committee has as yet been able to give to this important subject.

4. The Medical Society of the State of New York cannot continue to issue the Directory and the monthly Journal, now being published by the New York State Medical Association, in the event of reorganisation.

For the foregoing reasons the committee asked that its report be received and that further time be given it for the development of the purposes for which it was created.

Soon after the American Medical Association abrogated its code of ethics in May last, the chairman of the committee invited further conference with the New York State Medical Association, and on October 1, 1903, the latter body appointed a new committee, conferring upon it full power to effect a union of the two organisations as will be seen by the following resolutions, offered by Dr. Joseph D. Bryant and seconded by Drs. John A. Wyeth and E. D. Ferguson, which were passed unanimously:

WHEREAS, The members of The New York State Medical Association desire a union of the medical profession in the State of New York; and

WHEREAS, It is deemed expedient for the attainment of this purpose to make further effort to bring together The New York State Medical Association and the Medical Society of the State of New York under the name of "The Medical Society of the State of New York";

Resolved, That a committee of five be appointed by the chair, and said committee is hereby empowered to do whatever is necessary and expedient to bring about such a union in a just and equitable manner; and

Resolved, That the committee so empowered may confer, co-operate and unite with a committee of the Medical Society of the State of New York for the purpose of forming said union of the two medical organisations; and

Resolved, That a copy of these resolutions be transmitted to the secretary of the Medical Society of the State of New York, with a request that their Conference Committee be granted similar powers.

The following named committee was appointed in accordance with the above resolutions: E. Eliot Harris, chairman; Julius C. Bierwirth, Alexander Lambert, Parker Syms and Wisner R. Townsend.

At a special meeting of the Medical Society of the State of New York, held in the New York Academy of Medicine at New York City, Tuesday, October 13, 1903, the president, Dr. A. T. Bristow, of Brooklyn, stated the object of the meeting in well-chosen words. Dr. D. B. St. John Roosa, of New York, then rose and said:

As one of those who have lived long enough to see the beginning and, I hope, will live long enough to see the ending of this controversy that has been carried on so long, I have the pleasure of offering the following resolution, which, I think, will have the vote of every member of the Medical Society of the State of New York.

He then presented the preamble and resolution which read as follows:

WHEREAS, The New York Medical Association, at a recent special meeting duly assembled, has, by unanimous vote, appointed a committee, with full power, to meet with the similar committee of the Medical Society of the State of New York to arrange for the unification of the two organisations under the corporate name of the Medical Society of the State of New York; therefore, be it

Resolved, That the Committee of Conference of the Medical Society of the State of New York, already appointed, be given power equal to and commensurate with the powers recently granted the committee created by the New York State Medical Association for the purpose of unifying the two state medical societies into the Medical Society of the State of New York.

Dr. Willis G. Macdonald, of Albany, seconded the motion of Dr. Roosa in a brief speech, remarkable for its appropriate phrase-

ology and good form. Both gentlemen received the generous applause of the large house and a unanimous vote of adoption completed the session, which immediately adjourned. (See p. 256.)

By this action of the society the committee representing it is clothed with ample authority to adjust all questions relating to union that are likely to arise. Its personnel is such as to inspire implicit confidence in its action. As will be remembered, it is composed as follows: Henry L. Elsner, chairman; A. Jacobi, A. Vander Veer, George Ryerson Fowler, and Frank Van Fleet. By the time appointed for the Medical Society of the State of New York to hold its ninety-eighth annual meeting at Albany, January 26-28, 1904, we confidently predict that the unification of the medical profession in the Empire State will be an accomplished fact.

Epidemic Impetigo Contagiosa.

SOME of the most prominent teachers in the school of Vienna are still insisting, in spite of modern revelation, that impetigo contagiosa is merely one of the many varieties of eczema. A volume recently issued under their auspices furnishes illustrations of what they consider typical cases corroborating their contention. This teaching is damaging to those American students who seem to regard a foreign education as superior to that which can be obtained at home, and who return here to disseminate the heresies of the Vienna school.

Impetigo contagiosa must be regarded as a disease *sui generis*, although the bacteriologic findings differ little from those relating to pus otherwise existing. Some investigators claim that the exciting agent is the streptococcus, while others consider it to be a specific coccus, differing from both the conventional staphylococcus aureus and the streptococcus of Fehleisen. At the time of the writer's first acquaintance with the disease, a few years ago, impetigo was represented by the "stuck-on crust" variety of Tilbury Fox, being, however, almost wholly confined to poor children and rarely invading the adult. Since 1898, several phases of the disease have appeared which are more or less worthy of note, especially considering the fact that, up to the present time, our medical magazines and textbooks have published so few articles relating to the subject. The disease no longer confines itself to the poor, or to children, but indiscriminately attacks persons of all classes and ages. It has been epidemic in various portions of Buffalo, and has visited almost every hamlet in Western New York. In the majority of cases, the recog-

nised source of infection was the barbershop. In one little town of four hundred inhabitants, where there was one barber, almost every customer was infected, including those who merely had the hair cut or the neck shaved. The variety was bullous. It would often heal in the center and leave rings, and would extend peripherally by undermining the epidermis with fluid. Although the essential lesion always began as a vesicle, it very rapidly enlarged to from one-quarter to three inches, the augmented lesion appearing as if the skin had been touched with carbolic acid. It was surprising how often the affection was taken for ringworm; in fact, in the majority of cases, it was diagnosticated as such. To this form of impetigo has been applied the popular term "barber's itch," which is a synonym for *tenæ baræ*, and which should not be mistaken for the circinate form.

Impetigo has a clinical entity, but, nevertheless, it is subject to continual changes, probably due to the infecting organism itself, although climate, humidity and temperature have some influence on these transformations. These facts have contributed more or less to the existing confusion of names by which the average physician is so frequently puzzled. It should be the mission of the medical profession to inform the public regarding the nature of this disease and to interest the barber in all matters relating to it, especially sanitation, which is indispensable. As a rule, the barber is an obstinate proposition, for whenever he is informed of the presence of impetigo in his shop, in the majority of the cases he claims that it is caused by the immorality of his customer, a screen which possesses very wide meshes. The offender can only be reached by iron-clad rules and regulations; and it should be a matter of general interest that many boards of health, including that of Buffalo, have inaugurated measures to enforce observance of existing laws. Besides, the state has appointed three inspectors of barbershops, selected from the profession itself. Would it not have been better if one of these had been a trained man, competent to deal with matters which require medical skill and experience?

The careful consideration of impetigo contagiosa just at this time is important, for within the past few months epidemics of the disease considered here have appeared in Buffalo.

Faith Healers and the Law.

THE unrighteous cause of faith cure and similar hocus pocus has received rather a severe setback in this state, through a recent decision of the Court of Appeals, which legally established

the criminality of parents or guardians who refuse or neglect to provide proper medical attendance for children in their care. The opinion is important, because it firmly defines the term "medical attendance," and will have an important bearing on all cases which may hereafter come up involving that question. And now that such a decision has been made it is quite probable that the District Attorney of Erie county may be more successful in his prosecution of the fakes and fakirs who are brought to his attention.

The case on which the decision was made was that of Luther Pierson who, on March 21, 1901, was arrested at White Plains for failing to provide medical attendance for his two-year-old daughter, who was ill of pneumonia, and who died on February 15. On May 23, he was found guilty of a misdemeanor and sentenced to pay a fine of \$500, or spend 500 days in prison. His attorney filed notice of appeal, and two days later Pierson was released on bail. The case was taken to the appellate division, and Pierson made the statement that he was a divine healer. He was asked if this was not the same as christian science, and replied, "No; divine healing is diametrically opposed to the diabolical counterfeits, which are utterly anti-christian. These impostures are only seductive forms of spiritualism."

When the case was considered by the appellate division Justice Bartlett, who wrote the opinion reversing the conviction, held that the "medical attendance" referred to in the statute does not mean exclusively the attendance of a medical practitioner in the general sense of the term. It is worthy of note that Justice Goodrich dissented from this opinion.

An appeal was then taken to the Court of Appeals by District Attorney Andrews, the prosecuting officer, and after careful consideration of the merits of the case Justice Haight wrote an opinion reversing the appellate division and sustaining the trial court. The opinion declares dependence on faith in healing in a case of sickness to be criminal negligence. In delivering the opinion of the court, Justice Haight said:

It would seem that the legislative intent is reasonably clear, although possibly more precise language could have been employed. The section of the code under which the indictment was found contemplates that there are persons upon whom the law casts a duty of caring for minors. We are aware that there are people who believe that the Divine power may be invoked to heal the sick, and that faith is all that is required. There are others who believe that the Creator has supplied the earth, nature's storehouse, with everything that man may want for his support and maintenance, including the restoration and preservation of

his health, and that he is left to work out his own salvation, under fixed natural laws. There are still others who believe that Christianity and science go hand in hand, both proceeding from the Creator; that science is but the agent of the Almighty, through which he accomplishes results, and that both, science and Divine power may be invoked together to restore diseased and suffering humanity. But, sitting as a court of law for the purpose of construing and determining the meaning of statutes, we have nothing to do with variances in religious belief, and have no power to determine which is correct. We place no limitations upon the power of the mind over the body; the power of faith to dispel disease, or the power of the Supreme Being to heal the sick. We merely declare the law as given us by the legislature. We find no error on the part of the trial court that called for a reversal.

Since the handing down of the opinion, John Alexander Dowie, of Zion, Ill., of whose Christian Catholic Church Pierson was a member, has entered New York on a crusade of purification. A reasonable time had been given Pierson to pay his fine, and not having done so, the district attorney applied for a bench warrant for his arrest. As it was being made out Pierson's attorney entered the court and paid the fine. Almost immediately after that the attorney, who defended the faith healer, secured an attachment against Dowie for something over \$1,000, for fees in connection with the Pierson case, claiming that he was retained at Dowie's request. In the meantime Dowie had folded his tents and slipped away from New York, the scene of one of the most miserable fiascos in the way of a religious crusade the world ever saw.

The opinion stands and it applies to faith curists, faith healers, christian scientists, magnetists, vibrilists, and all the rest of the fakes and fakirs.

THE increase of tetanus, resulting from Fourth of July injuries, is attracting attention all over the country. Medical societies and medical journals are discussing means and methods of controlling this horrible disease and its ghastly ravages. Important action on this subject was taken by the Mississippi Valley Medical Association during its recent meeting at Memphis. The secretary, Dr. Henry Enos Tuley, of Louisville, transmits to us a summary of the proceedings on that topic, with the request for publication of the same. We gladly comply therewith and invite the attention of our readers to a serious consideration of the subject. It will require an active campaign on the part of physicians and educators to convince the small boy of the heathenish course

he is pursuing in the present methods of celebrating independence day. There are also some larger boys that need instruction on this point and, perhaps, some parents might be included.

Here is the report of the society referred to:

In view of the fact that more than 400 deaths from tetanus occurred following the Fourth of July celebration of 1903, as shown by the statistical report elaborated by Dr. S. C. Stanton, of Chicago, and published in the *Journal of the American Medical Association* of August 29, 1903, the great majority of which might have been prevented had proper precautions been taken; therefore

Be it Resolved, That the conclusions which follow, as offered by Dr. Stanton in a paper presented before the association, at the Memphis meeting, be endorsed as the sense of this association, and further

Be it Resolved, That the secretary be instructed to forward a copy of these resolutions and conclusions to the medical press, associated press, and the secretaries of the several state medical societies, with the request that they publish same and take suitable action thereon.

1. Enforcement of existing laws regarding the sale of toy pistols and other dangerous toys.

2. Enactment of laws by the nation, states and municipalities prohibiting the manufacture and sale of toy pistols, blank cartridges, dynamite canes and caps, cannon crackers, etc.

3. Open treatment of all wounds, however insignificant, in which from the nature or environment there is any risk of tetanus.

4. Immediate use of tetanus antitoxin in all cases of Fourth-of-July wounds, or wounds received in barnyards, gardens, or other places where tetanus infection is likely to occur.

5. As a forforn hope, the injection of tetanus antitoxin after tetanus symptoms have appeared.

THE importance of a knowledge of the history of medicine has been over and again asserted in the columns of medical journals within the last few years. The profession is becoming roused to the propriety of establishing chairs in the medical schools for the purpose of teaching this hitherto much neglected topic. We are pleased to learn that the University of Maryland has taken the initiative in establishing such a professorship to which Dr. Eugene F. Cordell, of Baltimore, has been appointed. Dr. Cordell's essay on the Doctors and Medicine of Horace, published lately in *Johns Hopkins Hospital Bulletin*, has attracted much attention, and we may expect to see more from his pen of a similar nature. We trust other medical schools will follow the example of the University referred to.

THE fashion adopted some time ago by the *New York Medical Journal* of publishing signed editorials, is not likely to become popular with medical journals. It destroys the impersonality of editorial contributions and leads to unwise complications in editorial discussions. Moreover, it is doubtful whether such a method could be pursued for any considerable length of time without exhausting the field of editorial writers. On the whole, we do not believe the new fashion will become the prevailing mode among medical periodicals.

PERSONAL.

DR. WILLIAM H. THORNTON, of Buffalo, was elected president of the New York State Medical Association, at its annual meeting, held at New York, October 19-22, 1903.

DR. CHAUNCEY PELTON SMITH, of Buffalo, has been appointed medical officer of the Lackawanna Steel Company at West Seneca.

DR. WALTER D. GREENE, health commissioner, and Dr. William G. Bissell, bacteriologist of the department of health, attended the annual meeting of the American Public Health Association, at Washington, D. C., October 26-30, 1903, as the official delegates from the Buffalo department of health.

DR. R. C. TABER, of Tonawanda, will soon remove to Jackson, Mich., where he will continue in the future the practice of his profession. With this object in view he has resigned the office of health physician at Tonawanda.

DR. LAWRENCE HENDEE, graduate of the University of Buffalo, 1897, and for several years past an instructor in anatomy at Cornell University, has been appointed volunteer assistant in surgery at the University of Koenigsberg, Germany. Dr. Hendee has been in Berlin for several months pursuing surgical studies.

DR. CARLOS F. MACDONALD, of New York, has removed his office from 85 Madison avenue to 29 East 44th street. Hours, from 10 a.m. until 12 m., Sundays excepted, and by appointment. Telephone 4588-38th St.

OBITUARY.

DR. ROBERT NEWMAN, of New York, died August 28, 1903, aged 73 years. Dr. Newman was a widely known advocate of electrolysis in the treatment of stricture of the urethra. He was also a frequent contributor to the medical journals and was a member of various local, state and national medical societies. He graduated at the Long Island College Hospital in 1863.

HON. WILSON SHANNON BISSELL, chancellor of the University of Buffalo, died at his residence in this city, October 6, 1903, aged 55 years. Mr. Bissell had been prominent in the affairs of Buffalo for many years and ranked as one of its ablest lawyers as well as one of its most respected citizens. He served as post-master general in the second cabinet of President Cleveland, and belonged to various local organisations, including Buffalo Historical Society, all of which adopted memorial minutes.

The faculty of the medical department of Buffalo University adopted the following:

The faculty of the medical department of the University of Buffalo wish to express their profound sorrow for the death of the Honorable Wilson Shannon Bissell. Serving as he did for many years on the council of the university, as member, vice-chancellor and later as chancellor, he always had shown a hearty interest in its welfare and had ever been ready to forward its interests in every way in his power.

As a model citizen, a brilliant lawyer, a devoted public servant and best of all, as a noble Christian man, he will long be remembered; but his effective work for the University of Buffalo must be put among his good deeds not to be forgotten. While his death will be deeply felt by our citizens in general and by the nation at large, we feel that to us his loss comes with especial force, as at this particular time the university greatly needs his sound advice and accumulative wisdom and will miss them in proportion; therefore, be it

Resolved, That this expression of our appreciation of Mr. Bissell and of our strong sense of loss be spread upon the minutes and a copy be sent to his family. Signed, Matthew D. Mann, Dean; Charles Cary, Roswell Park, Charles G. Stockton, John Parmenter, Herbert M. Hill and Eli H. Long.

Mr. Bissell's remains were incinerated at the Buffalo crematory, and the ashes were buried in the family lot at Forest Lawn.

DR. CHARLES A. MURRAY, one of the oldest and best-known physicians of Chemung county, died at his home in Van Etten, Thurs-

day, September 3, 1903, aged 77 years. Dr. Murray graduated from Geneva Medical College in 1853, and practised his profession for fifty years, indeed, until within two weeks of the time of his death. He had been a member of Chemung County Medical Association, and was a prominent citizen in both business and politics.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists held its sixteenth annual meeting at Chicago, September 22-24, 1903, under the presidency of Dr. L. H. Dunning, of Indianapolis. The attendance was large, the papers were of excellent quality, and the discussions of sustained interest from the beginning until the close of the sessions. The official report of the proceedings, including the papers read will be published in the *American Journal of Obstetrics* for November. The annual dinner was served at the Auditorium Annex and was an occasion of unusual interest. Among the speakers were Drs. W. A. Evans and Fernand Henriotin, Chicago; Charles L. Bonifield, Cincinnati; Norman Bridge, Los Angeles; J. H. Carstens, Detroit; W. G. Macdonald, Albany, and L. S. McMurtry, Louisville. A luncheon was tendered the association by Drs. Murphy, Ferguson, Goldspohn and Lyons, which was served at the Athletic Club on the third day of the meeting and which was a function superb in all of its appointments.

The following-named officers were elected for the ensuing year: president, Walter Blackburn Dorsett, Saint Louis; vice-presidents, Aaron B. Miller, Syracuse, and William D. Haggard, Nashville; secretary, William Warren Potter, Buffalo; treasurer, Xavier O. Werder, Pittsburg; executive committee (to fill vacancies), Rufus B. Hall, Cincinnati, and Lehman H. Dunning, Indianapolis.

THE Roswell Park Medical Club, at a meeting held October 12, 1903, elected officers as follows: president, Dr. F. C. Busch; vice-president, Dr. James A. Gibson; secretary and treasurer, Dr. George F. Cott.

THE Mississippi Valley Medical Association at its annual meeting, held at Memphis, October 7-9, 1903, elected the following-named officers: president, Hugh T. Patrick, Chicago; first vice-president, Bransford Lewis, Saint Louis; second vice-president, George

W. Cale, Springfield, Mo.; treasurer, Thos. Hunt Stucky, Louisville; secretary, Henry Enos Tuley, Louisville.

THE Buffalo Academy of Medicine held meetings during the months of September and October, 1903, as follows:

Section on Ophthalmology, Otology, Laryngology and Rhinology.—Tuesday, September 29. Program: Report of cases: (1) Peculiar symptoms following radical mastoid operation; (2) Unusual case of aneurism pressing on recurrent nerve; Presentation of specimens: (1) Carcinoma of esophagus; (2) Large nasal polypus; (3) Diphtheritic tracheal casts, George F. Cott; The auditory nerve; its anatomy and physiology, James A. Gibson.

Section on Surgery.—Tuesday, October 6. Program: Cerebral compression due to traumatic extradural hemorrhage, Eugene A. Smith; subject unannounced, Roswell Park; Presentation of cases: Acute obstruction caused by inflammation of Meckel's diverticulum, Marshall Clinton.

Section on Medicine.—Tuesday, October 13. Program: The treatment of pneumonia, DeLancey Rochester. Discussion: Allen A. Jones; Hydrocephalus: an attempted classification, William C. Krauss.

Section on Pathology.—Tuesday, October 20. Program: Protozoa as causes of disease (yellow fever, spotted fever, smallpox, malaria and dysentery), H. G. Matzinger; The protozoon of smallpox,—illustrated by lantern slides,—G. N. Calkins.

Section on Obstetrics.—Tuesday, October 27. Program: Personal experience in puerperal fever, Chas. E. Congdon. Discussion opened by Herman E. Hayd.

THE Lake Erie Medical Society will hold its next regular quarterly meeting at Dayton, N. Y., Friday, November 6, 1903. The following program has been prepared: (1) Early diagnosis and treatment of tubercular osteitis of the knee, Bernard Bartow, Buffalo; (2) The present status of treatment by *x-ray*, and ultra-violet ray, its results and restrictions, Joseph C. Clark, Olean; (3) Interference in labor, Ira W. Livermore, Gowanda; (4) Paper, L. G. Hanley, Buffalo; (5) The present status of prevention and treatment of pulmonary tuberculosis, A. D. Lake, Gowanda. The president is S. S. Bedient, Little Valley; vice-president, A. L. Borden, Gowanda; secretary and treasurer, —

Smith, Olean; program committee, A. D. Lake, Gowanda, and C. H. Richards, Dunkirk.

THE Medical Association of Erie County held its quarterly meeting at the University Club, Buffalo, Monday, October 5, 1903, at 8.30 p.m. The following program was observed: (1) Presentation of cases and specimens; (2) Acute hemorrhagic pancreatitis, with report of a case, Marshall Clinton. Leaders of discussion: Stephen Y. Howell, Charles G. Stockton; (3) General discussion; (4) Report of cases: (a) Perforative appendicitis in the puerperium; (b) Partial closure of the vagina due to puerperal infection, James E. King. Leaders of discussion: L. G. Hanley, L. Schroeter; (5) General discussion.

COLLEGE AND HOSPITAL NOTES.

THE Massachusetts General Hospital formally opened its new outpatient department on "Ether Day," October 16, 1903. Invitations were issued by the trustees to the friends of the hospital, to inspect the new branch and other recent additions on the day mentioned between 12 and 3 o'clock. Refreshments were served on the lawn at 1 o'clock, to a large gathering of people, many of whom came from other places.

THE medical department of the University of Buffalo opened its fifty-eighth regular session Monday evening, September 28, 1903. Dr. Matthew D. Mann, dean of the faculty, presided, and Dr. Carlton C. Frederick gave the inaugural lecture, the trend of which was to indicate how success might be attained in the profession of medicine. In addition to the faculty there were a number of physicians from out of town in attendance. The dean said that the department was in better shape as to equipment than ever before and that its future was very bright.

BOOK REVIEWS.

SURGICAL DISEASES OF THE ABDOMEN. With special reference to diagnosis. By RICHARD DOUGLAS, M. D. Formerly professor of Gynecology and Abdominal Surgery, Medical Department, Vanderbilt University, Nashville. Octavo, pp. 883. Illustrated by 20 full-page plates. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, cloth, gilt top, \$7.00.)

The importance of a thorough understanding of those diseases of the abdomen which may require surgical intervention, was

never so insistent as at the present moment. Indeed, almost every abdominal affection may come within surgical purview at some stage in its course,—a fact that physicians, as distinguished from surgeons, have been somewhat slow to admit, but cannot further or longer dispute. The treatise before us will do much to clear the atmosphere of many doubts that have lead to misunderstandings and miscomprehensions in the diagnosis and management of diseases of the abdomen.

Inasmuch as diseases affecting the peritoneum lie at the threshold of the subject dealt with in this book, it is appropriate that Professor Douglas should begin by considering peritonitis. The opening chapter discusses the subject from every surgical viewpoint, and disposes of the old teaching relating to primary peritonitis, which Douglas says is of such rare occurrence as to justify its elimination in the consideration of the general symptomatology. Not less forceful is this author in treating of tuberculous peritonitis, which he defines as a specific inflammation of the peritoneum, excited by the bacillus tuberculosis.

Passing over many excellent chapters that deal with ulcer of the stomach, sarcoma and carcinoma of that organ, and like conditions of the duodenum, stenosis of the pylorus, foreign bodies in the stomach, and the like, we come to intestinal obstruction, where we pause for comment, first, because of the importance of the topic; and, second, because our author is so clear and sound in dealing with it. This is a condition where promptitude of diagnosis is imperative. A few hours delay may result fatally, hence the surgeon must be armed with definite knowledge, quick perception, and faultless technic. This chapter abounds in interest and deserves careful study. Its teachings are of the best regarding this condition, which often taxes the skill and energy of the surgeon to the extreme limit.

The next topic upon which we shall comment is appendicitis. And here, again, we find the author not wanting in handling a subject of supreme importance. He surveys the whole field with judicial calmness and conservative judgment; in short, Douglas is so completely at home with his theme that scarcely a point, even of minor importance, is omitted, and he has presented many aspects of it which, if not entirely new, are developed in a new light. It is a terse, logical and scientific canvassing of one of the most important questions connected with abdominal surgery. It is essentially a surgical disease and must be studied from the vantage ground of the surgeon,—a syllogistic argument that pervades this chapter. There is so much of interest said in the space assigned to appendicitis that it becomes a difficult matter to break away from its consideration, but we must pass on.

Gallstone disease is another subject that has assumed great surgical importance within the last few years. Douglas has given an elaborate dissertation on this topic, and his tables of differential diagnosis have been prepared with much care. The

whole question is discussed in a clear fashion and all the strong light of recent experience is thrown upon the screen. Every form of operation is detailed and the appropriate application of each is pointed out. This chapter is a succinct account of the disease, with all its complications, and will naturally attract the careful attention of surgeons, but it should not be neglected by physicians who do not practise surgery, but who themselves must be prepared to advise in emergency cases that so frequently arise.

Diseases of the kidney have become an attractive field for the surgeon of late years, and almost all conditions from renal calculus to chronic Bright's disease, have been successfully dealt with by the surgeon's knife. Douglas is particularly interesting in discoursing upon calculus, wandering kidney and hydronephrosis, but he is also graphic in dealing with renal tuberculosis and tumors of the kidney. He is abreast of the art in all he writes, regarding the various manifestations of kidney disease, and puts a vast deal of information into compact and even comparatively limited space.

Gunshot and stab wounds of the intestines and other abdominal viscera command appropriate attention and adequate treatment. Douglas, himself, has had a large experience in this kind of surgery, and reports his cases in tabular form. Out of 21 cases of gunshot wounds of the abdomen, involving various viscera, he reports 8 recoveries,—a splendid showing, considering the serious nature of the injuries.

Fibromyoma of the uterus, neoplasms of the ovaries and broad ligaments, and ectopic gestation constitute a triad of subjects that serve to bring to a fitting close this admirable treatise. Uterine fibromata are presented with much address, and the chapter allotted to their consideration is one of the strongest in the book. Neoplasms of the ovaries and broad ligaments receive due consideration, while ectopic pregnancy is masterfully presented.

In presenting this brief commentary, we have selected a few of the salients of this excellent contribution to the literature of surgery. It is a pretentious volume, and we regret that our notice does it such indifferent justice. There are many other subjects of great interest and importance, which are handled with admirable skill by the distinguished author, but the limitations of this review preclude comment upon them. The work is unique; it abounds in useful information, presented in a practical way. It deals with each topic with a directness that is attractive. Its definitions of the various diseases are terse and exact, and it will serve to distinctly classify surgical diseases of the abdomen. Finally, it is a work that can be studied with pleasure by the scholar, for it is a model in rhetorical finish, and is faultless in diction. The abdominal surgeon will be sure to obtain it because it is an exposition of the best thought in his special field of work, while it is equally adapted to the needs of the physician who does not practise surgery, because it gives him the information which he

most needs and which is not to be found elsewhere in such available form. We could wish that the book had been more elaborately illustrated but, in view of its other excellent qualities, we may trust to future editions to meet this feature of medical book-making, which has become wellnigh an imperative necessity.

GYNECOLOGY. A Textbook for Students and a Guide for Practitioners. By WILLIAM R. PRYOR, M. D., Professor of Gynecology in the New York Polyclinic Medical School; Attending Gynecologist to New York Polyclinic Hospital; Consulting Gynecologist to St. Vincent's, New York City and St. Elizabeth's Hospitals. Octavo, pp. 396, with 163 illustrations in the text. New York and London: D. Appleton & Company. 1903. (Price, \$3.50.)

This textbook differs from others on gynecology in several particulars. In the first place, the author has placed a limit upon the subjects presented, including only those that are strictly gynecological and upon which a teacher of the topic would usually lecture or demonstrate. Rare diseases are not described or illustrated, nor are operations considered that now have been abandoned; bibliography has been omitted; anatomy and microscopy have not been appealed to in particular, and the treatise in this manner has been simplified and made to embrace only such material as will interest the undergraduate and general practitioner of medicine.

Two general divisions have been made of the book, the first, dealing with diseases which are described, and the second, with operations which, in the main, are illustrated. Pryor gives general direction relating to examination that, for the most part, are practical, but we think him in error in attaching so little importance to the kneechest posture. When needed it has not been found difficult or embarrassing in our experience. The chapter on inflammations is most satisfactory in description and treatment, puerperal sepsis being especially well presented. In treating the subjects of distortions and displacements, the author has done splendid work. His comments on the use of the pessary deserve to be carefully studied and remembered.

Diseases of the vulva receive rather less consideration than their importance requires, but not so of diseases of the vagina, urethra, and bladder; yet, perhaps, the author is at his best when dealing with tumors of the ovary and uterus. He describes the operations well that relate to these conditions, among which are a number of original points in technic. Pryor is very interesting, too, in handling the subject of cancer of the uterus, and gives a number of excellent illustrations of its pathology, many of which are taken from Cullen's elaborate treatise.

The surgery of the perineum and cervix are among the well-described and equally well-illustrated topics set forth; indeed, perhaps it is not out of place to say that the author is at his best in this part of the book. His technic is clever and his drawings

illustrating this work are the best we have seen. Operations for the cure of retrodeviations of the uterus,—that much disputed field,—are given direct attention, and the author's views are clearly set forth. Abdominal section, hysterectomy, salpingo-oöphorectomy and the care or management of patients after abdominal sections are presented in succession. The author uses the word "celiotomy" in this latter relation,—an absurd term that is not needed and adds further to an already overburdened vocabulary.

The chapter on hysterectomy for pelvic suppuration deserves the careful study of every gynecologist. It contains much that is helpful toward a clearer understanding of the difficult problems connected with this complicated subject. Pryor gives prominence in text and picture to vaginal hysterectomy in dealing with pelvic suppuration, but he differentiates with skill the conditions wherein it is applicable. A few minor topics, including anomalies of the female genital tract, bring this interesting book to a close. It is a pleasure to read it from beginning to end, because of the sustained interest that is maintained all through its pages.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A practical Exposition of the Methods, other than Drug-giving, useful for the Prevention of Disease and in the Treatment of the Sick. Edited by SOLOMON SOLIS COHEN, A. M., M. D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Volume VIII. Rest, Mental Therapeutics, Suggestion. By Francis X. Dercum, M. D., Professor of Nervous and Mental Diseases in the Jefferson Medical College of Philadelphia. Octavo, 332 pages. Philadelphia: P. Blakiston's Son & Co. 1903. (Price for the set, \$27.50 net.)

The subjects considered in this volume,—rest, mental therapeutics, suggestion,—are nowhere set forth in such detail, or as scientifically treated, as has been done here by Professor Dercum. The importance of rest in the treatment of disease has been once and again pointed out by previous writers,—notably over twenty years ago by Mr. Hilton, in his classic monograph on rest and pain. But here the nervous system, which is the first to suffer damage by overwork and especially by worry, is dealt with as nowhere else in this particular relationship.

The present volume is principally devoted to the systematic consideration of that method of treatment sometimes flippantly termed "rest cure." This is the treatment given in the majority of sanatoria which, very justly, in most instances, makes them popular; but in this treatise physicians will learn how to apply rest in a clinically scientific fashion and how to make it fit the etiologic, pathologic and diagnostic factors pertaining to diseased or fretted conditions.

Two chapters, constituting the second part of the book, are set apart for the presentation of the therapeutics of mental diseases, which abound with valuable thoughts on the prevention

and treatment of insanity and special forms of mental disease. Dr. Dercum is a master in this field, and his observations are entitled to the weight of authority.

In the third part of the volume, suggestion is considered in the most scientific manner. It is stripped of its mystery and its valuable features are laid bare for the use of medical men who can employ it rightfully. This section should be carefully studied by every practising physician, without regard to special lines of professional pursuit.

This series has contained many volumes of great interest and value, but we doubt if any one of them heretofore issued has excelled this particular number in importance or scientific worth. Dr. Dercum is a student of his art, clear of perception, and accurate in recording his facts. Moreover, he writes in clear English, and does not juggle with words. One cannot fail to understand his meaning, or to realise that he is presenting only those statements of fact which observation has proven to be demonstrated truths.

DISEASE OF THE PANCREAS. ITS CAUSE AND NATURE. By EUGENE L. OPIE, M. D., Associate in Pathology in the Johns Hopkins University; Fellow of the Rockefeller Institute of Medical Research. Octavo, pp. 359. Illustrated. Philadelphia and London: J. B. Lippincott Company. 1903. (Price, \$3.00.)

Not until recently has pancreatic disease attracted that attention which its importance merits. The author of this book has contributed in a large measure to our present knowledge of the subject, in society papers and magazine articles published during the last three or four years. The treatise he now offers to the profession is the most pretentious American book dealing with disease of the pancreas.

After a somewhat lengthy preface, the anatomy of the pancreas is taken up and the variations from the ordinary are pointed out. An excellent reproduction of the original drawing of Wirsung is given. Anomalies of the pancreas are described and then an interesting chapter on its histology is presented. Now, we come to a consideration of acute inflammation of the pancreas,—a chapter that is most complete in its material and method, pointing out most clearly the several varieties of the disease in question. The association of acute pancreatitis and cholelithiasis is graphically described in the history of a case studied by the author at an autopsy, where over 100 gallstones were found, varying in diameter from a half to one centimeter. The etiological relation between these two conditions,—acute pancreatitis and gallstone disease,—is fully considered, and so, too, are hemorrhagic and gangrenous pancreatitis.

Fat necrosis furnishes the topic for a most interesting and instructive chapter, in which the production of this condition by experimental methods is described, and the whole subject re-

ceives elaborate treatment. Next, chronic interstitial pancreatitis in its several varieties, is taken up and dealt with in much detail at considerable length. Hyaline degeneration of the pancreas furnishes material for an instructive chapter, while the pathology of diabetes mellitus constitutes a chapter that should be read by every practising physician. The symptoms and treatment of pancreatic disease is the subject of the last chapter in the book, and is a fitting finale to one of the choicest contributions to medical literature that has appeared in recent years.

It is a work that reflects credit upon American medicine and will be prized by every one fortunate enough to possess it.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. KELLY, A. M., M. D., Philadelphia, with the collaboration of Wm. Osler, M. D., Baltimore; John H. Müsser, M. D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris, and Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume II. Thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. 1903. (Cloth, \$2.00.)

The field covered by the "clinics" is unique and it is being well occupied. The subjects considered in this volume are, the summer diarrhea of children, six articles; disease of the pancreas, two articles; treatment, four articles; medicine, four articles; surgery, three articles; pediatrics, one article; obstetrics and gynecology, three articles; and ophthalmology, one article. Opie's contribution on pancreatic disease will attract attention. His book on the subject is reviewed elsewhere in this edition of the JOURNAL. Deaver and Müller make an excellent contribution to the surgery of the pancreas,—an article that should be read by all surgeons.

The book, as usual, is replete with papers and lectures of interest by distinguished teachers at home and abroad.

SURGICAL ASEPSIS. Especially adapted to operations in the home of the patient. By HENRY B. PALMER, M. D., Consulting Surgeon to the Central Maine General Hospital. Ninety illustrations. Pages 237; large 12mo. Philadelphia: F. A. Davis Company. 1903. (Price, \$1.25 net.)

The tendency in recent years has been to send patients to a hospital, when operative work is demanded. This is an excellent plan when delay is permissible, or when transportation does not place the patient in greater jeopardy. Now and then, however,

an exigency arises that demands operation on the spot at the home of the patient, or wherever the accident happens that causes surgical inquiry. Occasionally, too, surgical disease suddenly takes on grave conditions, preventing removal of the patient to hospital. It is to meet such conditions that this manual has been prepared.

The book contains ample directions for the preparation of aseptic material, as well as for creating a surgical environment, during home operating and aftertreatment. It will be found a useful guide for the family physician, who may have immediate charge of the home treatment of surgical cases after operation. And also, it will serve to remind the surgeon himself of certain conditions that may not be neglected. It would be well, too, for nurses to familiarise themselves with the subject-matter of this excellent manual.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Vol. XV. Annual meeting, held at Cincinnati, O., November 11, 12 and 13, 1902. W. D. Haggard, M.D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1903.

This volume is fully up to the standard established by this association, as regards quantity and quality of the material which it contains. It records the proceedings of the fifteenth annual meeting, which was presided over by the late William E. B. Davis, who was the founder and organiser of the association. The fifteen volumes of transactions, which have now been issued, will always remain a monument to the memory of this distinguished and ever-to-be lamented physician, who was an ornament to his profession and a useful citizen far beyond the ordinary or average man.

This volume teems with excellent papers and discussions. It is a fitting complement to its predecessors, and an inspiration for future work. The next meeting of the association will be held at Atlanta, Ga., December 15-17, 1903, under the presidency of Dr. J. Wesley Bovée, of Washington, D. C.

BOOKS RECEIVED.

The Practice of Obstetrics. Designed for the Use of Students and Practitioners of Medicine. By J. Clifton Edgar, Professor of Obstetrics and Clinical Midwifery in the Cornell University Medical College; Attending Obstetrician to the New York Maternity Hospital. Royal octavo, pp. 1111. With 1221 illustrations, many of which are printed in colors. Philadelphia: P. Blakiston's Son & Co. 1903. [Price: cloth, \$6.00; sheep or half morocco, \$7.00.]

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume X. Skin and Venereal Diseases, Nervous and Mental Diseases. Edited by W. L. Baum, M.D., Hugh T. Patrick, M.D. Duo-

decimo, pp. 236. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

A Textbook of the Diseases of Women. By Thomas A. Ashby, M. D., Professor of Diseases of Women in the University of Maryland. Octavo, 661 pages, with 233 illustrations. Baltimore: Williams & Wilkins Co. 1903.

Consumption a Curable and Preventable Disease. What a layman should know about it. By Lawrence F. Flick, M. D., Founder of the Pennsylvania Society for the Prevention of Tuberculosis. Duodecimo, 295 pages. Philadelphia: David McKay, Publisher. 1903. (Price, \$1.00.)

A Manual of the Practice of Medicine. By A. A. Stevens, A.M., M.D., Professor of Pathology in the Woman's Medical College of Pennsylvania. Sixth Edition, thoroughly revised, enlarged and reset. Handsome post-octavo of 556 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, \$2.25 net.)

The Principles and Practice of Hydrotherapy. A Guide to the Application of Water in Disease. By Simon Baruch, M.D., Professor of Hydrotherapeutics in the New York Post-Graduate Medical School and Hospital. Octavo, pp. 506; illustrated. New York: William Wood & Co. 1903. (Price, \$4.00.)

The Standard Medical Directory of North America. 1903-4. Including a Directory of Practising Physicians in the United States of America, Canada, Cuba, Mexico and Central America. Lists of practitioners of the Specialties and Alphabetical index of all Physicians in North America. Also Directories of Medical Officers of the United States Army and Navy, Medical Societies, Medical Colleges, Medical Laws and Boards, Medical Publications (Books and Periodicals), Hospitals and Sanitariums. Mineral Springs, Drugs and Medicines, Medical and Surgical Products, Manufacturers and Life Insurance Companies. Chicago: G. P. Engelhard & Co. (Price, \$10.00.)

Functional Diagnosis of Kidney Disease. With especial reference to Renal Surgery. Clinical experimental investigations by Drs. Leopold Casper and Paul Friederich Richter, Berlin. Translated by Dr. Robert C. Bryan, Richmond, Va., and Henry L. Sanford, Cleveland, O. Duodecimo, pp. 233. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$1.50.)

Nose and Throat Work for the General Practitioner. By George L. Richards, M.D., Otologist and Laryngologist, Fall River Union Hospital, Fall River, Mass. New York: International Journal of Surgery Co. 1903. (Price, \$2.00.)

Physicial Diagnosis of Diseases of the Chest. By Richard C. Cabot, M.D., Physician to out-patients, Massachusetts General Hospital. Small octavo, pp. 335. One hundred and forty-seven illustrations. Second revised edition. New York: William Wood & Co. 1903. (Price, \$2.50.)

A Textbook of Operative Surgery. Covering the Surgical Anatomy and Operative Technic Involved in the Operations of General Surgery. Written for Students and Practitioners. By Warren Stone Bickham, Phar. M., M.D., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York. Handsome octavo of 984 pages, with 559 illustrations, entirely original. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$6.00 net; sheep or half morocco, \$7.00 net.)

A Dictionary of Medical Science. Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Bacteriology, Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence,

Dentistry, Veterinary Science, etc. By Robley Dunglison, M.D., LL.D., late Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia. New (twenty-third) edition, thoroughly revised, with the pronunciation, accentuation and derivation of the terms, by Thomas L. Stedman, A.M., M.D., Fellow of the New York Academy of Medicine. In one imperial octavo volume of 1224 pages, with about 600 illustrations, including 85 full-page plates, mostly in colors, with thumb-letter index. Philadelphia and New York: Lea Brothers & Co. 1903. (Cloth, \$8.00 net; leather, \$9.00 net; half morocco, \$9.50 net.)

A Textbook of Pathology. By Alfred Stengel, M.D., Professor of Clinical Medicine in the University of Pennsylvania. Octavo volume of 933 pages, with 349 text-illustrations, many in colors, and 7 full-page colored plates. Fourth edition, revised. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

American Textbook of Surgery. For Practitioners and Students. Edited by William W. Keen, M.D., LL.D., F. R. C. S. (Hon.), Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; and J. William White, M.D., Professor of Surgery, University of Pennsylvania, Philadelphia. Fourth edition, thoroughly revised and greatly enlarged. Handsome octavo of 1363 pages, with 551 text-illustrations and 39 full-page plates, many in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$7.00 net; sheep or half morocco, \$8.00 net.)

Clinical Examination of the Urine and Urinary Diagnosis. A Clinical Guide for the use of Practitioners and Students of Medicine and Surgery. By J. Bergen Ogden, M.D., formerly Instructor in Chemistry, Harvard University Medical School, Boston. Second revised edition. Handsome octavo volume of 418 pages, illustrated, including 11 plates, 9 of them in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$3.00 net.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IX. Physiology, Pathology, Bacteriology, Anatomy, Dictionary. Edited by W. A. Evans, M.D., Adolph Gehrmann, M.D., William Healy, M.D. Duodemico, pp. 233. Chicago: The Year Book Publishers. 1902. (Price, \$1.25; entire series, \$7.50.)

Modern Surgery: General and Operative. By John Chalmers Da-Costa, M.D., Professor of the Principles of Surgery and of Clinical Surgery in the Jefferson Medical College, Philadelphia. Handsome octavo volume of 1099 pages, with over 700 illustrations, some in colors. Fourth edition, greatly enlarged and entirely reset. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

Nervous and Mental Diseases. By Archibald Church, M.D., Professor of Nervous and Mental Diseases and Head of Neurological Department, Northwestern University Medical School; and Frederick Peterson, M.D., President New York State Commissioner in Lunacy; Chief of Clinic, Department of Nervous Diseases, College of Physicians and Surgeons, New York. Fourth edition, thoroughly revised and enlarged. Handsome octavo volume of 922 pages, with 338 illustrations. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep and half morocco, \$6.00 net.)

A Textbook of the Practice of Medicine. By James M. Anders, M.D., Ph. D., LL.D., Professor of the Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Sixth edition, thoroughly revised. Handsome octavo volume of 1300 pages, fully illustrated.

Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.50 net; sheep or half morocco, \$6.50 net.)

A Textbook of Obstetrics. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Handsome octavo, 900 pages, with 746 illustrations, 39 of them in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

A Textbook of Obstetrics. By J. Clarence Webster, M.D., (Edin.), F. R. C. P. E., F. R. S. E., Professor of Obstetrics and Gynecology, Rush Medical College, in Affiliation with the University of Chicago; Obstetrician and Gynecologist to the Presbyterian Hospital, Chicago; Obstetrician to the Chicago Lying-in Hospital and Dispensary, Chicago; etc., etc. Handsome octavo volume of 767 pages, with 383 illustrations, 33 in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep and half morocco, \$6.00 net.)

LITERARY NOTES.

THE PATHOLOGY OF THE TYPHOID ULCER is the title of a booklet just issued by The Arlington Chemical Co., of Yorkers, N. Y. It contains four well executed plates, printed in colors showing: (1) swollen Peyer's patches; (2) superficial necrosis; (3) deep ulceration; (4) cicatrization. The descriptive text, comprising some seven or eight pages, is of scientific interest and accuracy. The illustrations could not be improved upon. The brochure will be sent to any physician upon application to the publishers at above address.

A DIAGNOSTIC CHART OF TUMORS AND PSEUDOTUMORS.—Battle & Co. have just issued a very useful chart of tumors, true and false, compiled by Dr. Edward C. Hill from standard works on surgery and pathology. The subject matter is divided into solid neoplasma (subdivided into benign and malignant growths) and true and false cysts. The general characteristics of each division are given, and their 24 classes, embracing over 100 varieties, are compared critically in columns under the following headings: tissue, topography, number, size, conformation, color, consistence, mobility, sensibility, surrounding tissues, occurrence, history of growth, and miscellaneous points. Features of special differential value are emphasised by the use of italics. The object of this chart is to show at a glance for ready comparison much that could be learned in a diagnostic way only from the perusal of hundreds of pages of ordinary text. It stands to such books as an atlas does to a gazetteer. This very convenient and valuable compendium is at the command gratis of any and every practitioner of medicine, who will take the trouble of writing a postal card to Battle & Co., 2001 Locust street, Saint Louis.

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ORIGINAL COMMUNICATIONS.

The Relation of Fat to Nervous Disease.¹

By BRADFORD C. LOVELAND, M. D., Syracuse, N. Y.

THIS paper will present briefly the results of clinical observation, and it is a matter of regret that the resources of the laboratory have not been available in confirmation of all the statements made. Fat exists to some degree in all living animals, and its proportionate amount is in some unknown way under the influence of the nervous system. The trophic function of the nervous system governs also the growth and development of muscles and other tissues as well as fat. It is a common clinical observation to note the rapid loss of flesh in melancholia, the impossibility of getting flesh on a case of anorexia nervosa, and like observations where the cause behind the disordered function was a diseased mental state.

It is not so common to note rapid and extreme increase in fat following an unusually distressing bereavement, or after hemiplegia. I have a picture of a woman who when it was taken weighed 213 lbs. She was 5 feet 1 inch in height and weighed, when married, at the age of 22, 90 lbs. Her weight gradually increased until at 45 years she weighed 140 lbs. Her weight remained about the same until she was about 58 years old, when she was called to a distant state to attend the funeral of a brother who died suddenly and unexpectedly. On her return she found that her husband had died during her absence, equally unexpectedly. From this time she rapidly increased in flesh till she reached 213 lbs., and with her small bones it was a painful burden to carry.

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

Another woman, after an attack of hemiplegia which left her mind weakened as well as her body, steadily increased in flesh until it took two nurses and a tackle to move her from her chair to her bed, and while I do not know her exact weight, I think it was more than twice what it had been in health, or nearly 300 lbs. We know that in the early stages of paresis the patient frequently accumulates considerable flesh, while in acute mania, and acute melancholia, there is a remarkably rapid loss of flesh. I knew two people both, strangely enough, having been victims of a runaway accident, resulting in a severe nervous shock, who afterwards developed that rather rare disorder called *adiposus dolorosa*, or Dercum's disease, one of which was reported in the American Textbook of Nervous Diseases. It seems strange that such remarkable and widely divergent results as these referred to should be brought about through the influence of the nervous system, but they are sufficient to show the very important relation that exists between the nervous system and the production of fat.

Fat is the stored up heat producing fuel of the body, in other words, that portion of the hydrocarbon elements of our food which has been absorbed and not burned up, or oxidised. These carbonhydrates may go through the body undigested, and therefore are incapable of absorption; may be oxidised in the body; partly oxidised in the body; or transformed into fat and stored in the tissues. Starchy indigestion may be a nervous affair, or an organic difficulty, and careful study will decide which. Oxidation or combustion within the body is the natural result of most of the absorbed carbonaceous foods.

Imperfect oxidation may be the result of over ingestion of carbonaceous foods, insufficient exercise, or a depressed state of the mind and nervous system, and in its turn may cause many a nervous irritation, and even mental depression. I have seen at least one patient in whose case I could tell whether or not he had eaten sugar at a meal by the depth of his depression three or four hours afterward. The sugar suspended, his depression lifted. Fat is the result in healthy persons, of a very small proportion of our carbonaceous foods, and its function is largely as a cushion and protection to nerves and other delicate structures, and as a reserve supply to keep up the bodily heat. Yet excess of fat seems to impede oxidation, lessen the bodily warmth, and in some instances to add more burden to already over-taxed nerves.

I was called in consultation recently in a neighboring town, where I found a woman 5 feet 3 inches high, weighing about 200 pounds lying in bed, where she had been for three months or

more, suffering with what is called neurasthenia, but in this case really hysteria. She showed unquestionable evidence of uric acid excess, both in the physical signs and in the urine. Her worst complaint was of a trembling and giving out in her legs and hips on any exertion. She had been taking frequent feeding, and used a considerable quantity of milk and eggs in her diet. It was evident that she did not need more flesh, but more oxidation, and elimination, and a marked change in her diet was advised. This case naturally suggests fat as a guide to diagnosis and prognosis, and as an index of improvement in the functional neuroses, or psychoses.

Given two persons suffering with much the same neurasthenic symptoms, the one fat, possibly too fat, the other lean, and it will usually be found that the hysterical element is much stronger in the fat than in the lean one, and a prognosis of recovery can be given with more of hope in the thin one than in the fat one. This is especially true if the thin patient has at one time been fleshy, and the digestive organs will stand forced feeding. Nourishment will answer for the watchword in the thin case, but we will have to choose some other motto for the fat one, say "elimination and oxidation," or "mental discipline, and increased mental control," or some combination of these.

Of fat as an index of improvement it may be said that in a thin person suffering from a neurosis or psychosis an increase in flesh is always a sign of improved nutrition, especially if blood conditions improve correspondingly, and hence encouraging to both patient and physician. But if a patient has been long in the toils of such an affliction it brings in another element to contend with, which is the question of habit, and that lack of self-confidence which so often seems to enslave the nervous invalid, and we cannot reasonably expect the strength and self-control to keep quite pace with the gain in flesh. The increase in flesh, however, may be used as a very efficient lever through which to apply mental therapeutics, which this class of patients generally need.

The trophic peculiarities of different individuals vary widely, and as we have all observed some people will keep fat on an amount and variety of food that will not keep others fat, but careful observation and definite prescribing of diet for individual cases and noting result, will soon enable one to prescribe diet for any given case so accurately that he can foretell whether they will gain or lose, and at what rate. One cannot, of course, be absolutely correct in his prognosis in this regard any more than in many other conditions, but he can be correct often enough to make it very encouraging to his patients and satisfactory to

himself. The class of patients best suited to this sort of prescribing are the so-called nervous dyspeptics, or gastric neurasthenics, who have become thin and anxious, leaving off one article of food after another thinking it hurt them, till they are really almost starved.

I have seen these sufferers after "doctoring" with medicines and digestives for years, and having dwindled to a mere shadow of their former selves, put on a diet, prescribed with the same care that we would prescribe quinine in malarial fever, gain from one to five pounds a week steadily for months till their recovery was complete.

The points it is desired to bring out in this paper are first, that the depositing of fat in the body is under the functional control of the nervous system; second, that a careful study of the patient with regard to the question of fat may be of great help both in diagnosis and prognosis; third, that a physician may so know his patient that he can prescribe a diet and tell the patient with a reasonable degree of certainty, whether he will lose, or keep the same, or gain flesh, and at what rate; fourth, that an increase in flesh may be taken as an index of improvement in acute mania, in melancholia, and in the thin neurasthenic, as well as in the tuberculous, where it has long been regarded as such.

FAYETTE PARK.

Personal Experience With Puerperal Fever.¹

By CHARLES E. CONGDON, M. D., Buffalo, N. Y.

IT IS not my object to present a review of typical puerperal infection, inflammation of the ovaries, tubes and the contiguous parts or their many complications with the confusing symptoms. I will, however, give some of the cardinal points in regard to diagnosis and treatment as a result of my own experience. It is an established fact that our ideas in regard to this disease have met fundamental changes since Oliver Wendell Holmes wrote his masterly essay in 1843. We now know that this condition is due to a bacterial infection and not to retained secundines or blood clots per se, the origin of which has always been more or less hypothetic.

In accordance with the virulence of the bacteria the symptoms become mild or severe, acute or chronic. The necessary factors for the presence of such an infection are an invasion of bacteria,

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

either from the blood, the intestinal tract or from without. In the normal condition the vagina is sterile and the uterine cavity is free from bacteria, but the vulva is not. Whenever an infection atrium is established by lacerations of the cervix uteri or any of the soft parts, then there is always a favorable opportunity afforded for a bacterial invasion followed by various pathologic changes in the vagina, uterus, adnexa or contiguous parts. Most frequently the invasion is plainly from without as the lesion begins in the pelvic organs and remains confined to them and the contiguous parts in nearly all cases. Less frequently and less certainly, from the blood and intestinal tract.

There is little need for me to remind you of the various micro-organisms found to be the invading germs or of the method of determining the principal or various microbic invasions found in the uterine cavity. Döderlein's tube is the means universally employed, yet in the light of our present knowledge, the scope of its usefulness is not so great as at first hoped for; though this is not due to the method, but to the inability to determine the virulence of the bacteria. Permit me to quote Fehling's own words. He says:

The attempt to divide the various forms of puerperal infection bacteriologically cannot be considered thus far as successful; this much is certain, that in numerous cases that have run a normal course streptococci and staphylococci have been found in the uterine cavity; and further, in the severe forms of infection sometimes streptococci, sometimes staphylococci, at other times bacteria coli communis and other bacteria or mixtures of these are found, thus demonstrating that the attempt to make a ready and positive diagnosis from a bacteriological examination thus far has been a failure.

As yet we know that an infection takes place, but to be able accurately to determine the virulence of the infection or the infection atrium is only problematic. And in view of the fact that a bacteriologic examination is to be relied upon only in exceptional cases, we are brought to the question of, what is a reliable means of arriving at a positive diagnosis? What tissues are involved? What are the limitations of the infection? In answer to these questions, permit me briefly to cite the diagnosis and treatment of a sufficient number of the 22 cases which I have personally treated, to try and make this point somewhat clear.

In one patient there were rapid pulse, high temperature, profuse perspiration, anxious expression with a history of a spontaneous delivery some days previous to my seeing her, in which the

placenta was not delivered for three or four days, although the patient attempted its removal herself; then a physician was called who delivered it. Two days later she developed pronounced puerperal sepsis; uterus was markedly enlarged, no ascertainable lesion. As soon as she was removed to the hospital it was found that there was a large collection of pus in the uterine cavity; digital exploration revealed the absence of placental tissue or other lesion which might account for her condition. This was diagnosed as an endometritis without involvement of other organs or tissues. The treatment was continuous irrigation of the uterine cavity for several days, and later it was given at intervals until her temperature became normal. She made a perfect recovery. This was a patient of Dr. Seidler, who referred the case to me.

The next case was delivered by a physician unknown to me. Three days following labor she developed sepsis and her condition was so alarming, that death seemed imminent; the physician was discharged and Dr. Clements was called, who referred the case to me. She was immediately removed to the hospital. The only ascertainable lesions were extensive lacerations of the vagina and vulva, which had become infected. Continuous irrigation effected a cure.

In another case, upon examination no special lesion was found, however she had a subnormal temperature, rapid pulse, frequent effortless emesis, flattened abdomen; in other words, she had general septic peritonitis, as the postmortem examination soon proved, the infection having taken place through a trivial cervical laceration.

Another case with abdominal distention and rigidity more noticeable in the lower part, constipated, with uterus movable, had high temperature, rapid pulse, and great exhaustion. The diagnosis was made of uterine abscess without involvement of other organs. At the abdominal section, this was verified. A number of abscess cavities were found immediately underlying the peritoneum and on one side beginning to extend to the broad ligament. The entire body of the uterus was very friable. The hysterectomy did not prolong her life as she died of shock. This case and the following were patients of Dr. Woodbury.

In still another case the patient entered the hospital with the high temperature and rapid pulse characteristic of this condition. Abdominal inspection and palpation were negative; vaginal and uterine examinations were negative except for a thickening of the broad ligament, especially noticeable on the left side. On opening the abdomen this proved to be a case of thrombosed

veins and dilated lymphatics of the broad ligaments. Removal of these with the uterus effected a cure.

In yet another case, that had in connection with rapid pulse and high temperature and delirium, a copious diarrhea of a very offensive odor, without pain or special tenderness, abdominal palpation and inspection elicited slight tympanites and muscular rigidity in the lower part of the abdomen. Vaginal examination, negative. Upon section of the posterior vaginal wall peritonitis was evident, and an ounce or more of pus was evacuated, which came from the region of the left ovary and a plastic exudate was everywhere present especially on the left side, extending to the flank. This patient made a very quick and easy recovery.

The next patient entered the hospital with a history of having had a miscarriage three days previously. She had accelerated pulse, a slightly elevated temperature and was still flowing. After a most careful preparation she was curetted and some placental tissue removed. Digital examination of the uterine cavity failed to disclose anything unusual, the ovaries and tubes also being normal. Three days later her pulse and temperature began to ascend and an examination revealed an enlargement of the left ovary, which was removed through an opening in the posterior cul-de-sac. The ovary was about the size of a large English walnut and contained nearly a dram of pus, the tube was not involved or removed. The patient's temperature became normal and remained so. A perfect recovery followed.

In another case of this condition, in which there was high temperature, rapid, feeble pulse, and great exhaustion, abdominal tympanites was present, but especially marked in the lower abdomen. Vaginal examination failed to reveal anything unusual. Upon opening the abdomen a considerable amount of serosanguinous pus was found; the intestines were injected and darkened, plastic lymph was present, while both ovaries and tubes were dark and necrotic. However, they were not removed, but a drain was placed and the patient made an uninterrupted recovery.

Of the 22 cases which I have had, of the 7 which were not subjected to operative procedures, 2 were properly treated, the other 5 were treated by the methods almost universally employed today, such as curetment, irrigation, intravenous or subcutaneous medication, douches, both medicated and nonmedicated, intra-uterine medication, direct application of various forms of salves in the uterus, vagina, over the abdomen and in the axilla.

The remaining 15 were treated surgically as follows: 3 abdominal hysterectomies, 1 recovery, 2 deaths; 1 vaginal hysterectomy; this case also succumbed. Of 5 abdominal sections with drainage,

1 died, 4 recovered. In 5 vaginal sections, all recovered. One patient treated by the combined method,—vaginal and abdominal section,—recovered. Of these 15 cases receiving operative treatment 4 died, 11 recovered. The 7 not receiving operative treatment, 5 died, and 2 recovered. Thus far the treatment of puerperal infection has been very unsatisfactory for the reason that it has been treated as a special disease and not as a variety of conditions the result of infection, and my experience leads me to pay special attention to the exact pathological condition present, to determine if the infection has gained entrance through lacerations of the soft parts,—the uterus itself and especially the cervix,—or through the corpus luteum. To say that the curet should never be used does not coincide with my experience, but in most cases I believe it better to err in not using it.

Irrigation is of undoubted value in certain cases, but it will be noted that it proved useful in but 2 of the 22 cases reported. A careful search for and inspection of lacerations, the discovery of the probable infection atrium and its appropriate treatment will avoid the often fatal error of using the curet, the douche or the scalpel unadvisedly, and when it is definitely determined that the uterine cavity contains no secundines, or is not the seat of suppurating fibroids and that the cervix, vagina, or vulva is not the probable seat of the infection, and when intestinal toxemia is eliminated, then and then only should section be thought of. An early recognition and removal of an ovarian abscess, as in my case 22, is the ideal treatment.

Hysterectomy has been so fatal not only in my hands but in others, that it is only to be thought of in very exceptional cases. Section and drainage of the pelvis, either through the vagina or from above, when the inflammatory process has extended to the contiguous parts, the ovaries, tubes or peritoneum, whether accompanied by pus formation or not, gives immediate and permanent relief; where the inflammatory process has rapidly formed in the cellular tissue of the broad ligaments, vaginal section should be made into the peritoneum, and then by separating the tissues these collections may be drained; if complicated by pelvic abscess the peritoneum itself may be opened. In the forepart of this paper the assertion is made that the inflammatory process is confined to the pelvis in the majority of cases, but if this condition is permitted to extend unchecked there is no positive assurance that it may not extend to any organ or tissue of the body; therefore prompt attention and quick decision will avoid complications.

The Bladder Troubles of Old Men.¹

By WILLIAM B. JONES, M. D., Rochester, N. Y.

MEDICAL and surgical science and art that have accomplished such wonderful things for women suffering from diseases peculiar to them, have until recently been unable to do more than palliate certain serious afflictions to which old men alone are liable. Retention of urine and its results are so common that every physician sees a case every little while and if the subject is mentioned in a company of medical men each one can recall cases in his own experience. It is estimated that one out of every ten aged men is afflicted, and of these a large proportion are so much so as to need radical treatment.

There can be no condition more pathetic than that of such a man whose active life is nearly spent, who through it all has anticipated a few years of quiet and comfort to enjoy the companionship of friends and family when he would be unable to work longer for them. Instead, he is tormented by the almost constant necessity of trying to relieve the bladder, accomplished but only partially and unsatisfactorily many times every day and night, and during an aggravation of the condition each effort is attended with an agony of spasm and pain. Worn with suffering the poor old man endures until exhausted he falls into a troubled delirium from which the only relief is death, which comes to him as the greatest possible mercy and to his friends most welcome, ending it all. That is only part of the story. There are the gradual onset and course of disease extending over a few years, the first enfeeblement of urination, when it is tardy and too frequent, because the bladder is not entirely emptied at any time, the first attack of retention after getting cold, wet or over tired, beginning catheter life with its dangers which result in permanent aggravation of the trouble, cystitis, which confirmed catheter users acquire from the use of the instrument, and all who suffer from retention acquire from that cause even without catheterism. There are enough exceptions to the last two statements to prove the rule, but no more.

The only obstructions to be considered are stricture and diseased prostate. Where the latter cannot be discovered and the former exists the appropriate method of urethrotomy should be employed. The external is now so simple and safe that it should be preferred if there can be any doubt about the internal being sufficient. After cutting down upon the membranous urethra it is

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

always possible and comparatively easy to pass a sound through the most obstinate stricture, which once done the caliber can always be kept as large as desired. There is no disadvantage in resecting the whole of the urethra for a short distance, because mucous membrane reforms where removed and reestablishes continuity of epithelial surface. Few strictures are neglected until the complications have brought a man so low, and nearly all patients now under consideration have prostatic deformities as a cause of their illness. I use the words prostatic deformities purposely. We must forget that we have considered this necessarily a hypertrophy, because it is often otherwise. There may be a hypertrophy of the gland as a whole, either symmetrical or irregularly placed.

General hypertrophy obstructs the urethra by compression alone, or if in some part there is a nodule pressing against it it may distort the shape of the canal and flatten it horizontally, vertically, or in any direction. Hypertrophy lengthens the prostatic urethra and necessitates the long, large, curved instrument, the so-called "old man's catheter". It also bulges the floor of the bladder, so as to leave a basin posteriorly which is never voluntarily emptied and raises the urethral inlet so that it is no longer at the most dependent part of the organ. Without the general hypertrophy nodules may grow where they press upon the urethra, distort its shape and prevent satisfactory urination. This will be better understood if one remembers that the tissues of the prostate resemble those of the uterus to some extent and one generally or locally hypertrophied has somewhat the appearance of one with multiple uterine fibroids. They resemble the submucos projecting into the central cavity which is urethral, interstitial, or like the subserous projecting from the outer surface, but it is into the bladder instead of the peritoneal cavity. A superficial nodule is often found to be the only abnormality, being placed just within the bladder at its orifice, blocking the latter, and if the nodule is pedunculated it floats back and forth in the current like seaweed in the tide, but it prevents the passing of any fluid like a ball valve trap.

Many prostates of old men are atrophied, contrary to common opinion, and most of these escape trouble but not all, for with the atrophy there is shrinking which makes the urethra smaller, and the strong sphincter fibers about the neck of the bladder becoming firmly contracted and inelastic form the so-called band of contracture, entirely preventing urination and making the catheter indispensable. The normal prostate lies wholly within reach of the finger when examining by the rectum. Its upper and lateral

boundaries can be palpated. General hypertrophy is easily recognised but the other three conditions cannot be. Therefore, if the patient has symptoms of obstruction, he needs treatment for obstruction, whether he has a recognisable general hypertrophy or one of the unrecognisable conditions, localised enlargement along the course of the prostatic urethra, enlarged nodule, whether sessile or pedunculated, that projects within the bladder and obstructs the internal meatus, or a band or contracture at the vesical sphincter, and in each of these last cases the prostate may be of normal size or smaller.

The profession has not been indifferent to the need of treatment for these men and efforts to palliate and to cure them have resulted in more remedies and operations than could be rehearsed in a short time, but most of them are disappointing and until recently the best were only partially successful. Medication, hygiene and regimen are sufficient for some cases. Those not made safe and comfortable in that way should have an operation. No man who uses a catheter is safe, and if he is compelled to do so surgery should be resorted to.

Of the operations one will answer for one case, another for another, but there is only one that is really the best for all. I refer to perineal prostatectomy as devised by Parker Syme, of New York. Briefly, it consists of an external urethrotomy, opening the urethra in the membranous portion and a little way to the prostatic, the passage of a collapsed rubber ball through this wound along the prostatic urethra into the bladder, to use as a tractor while enucleating the gland or a part of it, if no more is needed. The rubber ball is attached to the end of a soft rubber tube through which water is injected, distending the ball, so that pulling on it may not withdraw it. Traction on the tube now draws down the prostate, making it accessible and easy to operate upon. Also it compresses all tissues of the perineum and thus prevents hemorrhage, which would otherwise be profuse as the manipulation is among a plexus of large venous sinuses. Also there is counter pressure of the rubber ball, against which the surgeon works more rapidly and surely, and a foreign body that warns him of too near approach to the bladder so that he need not tear a hole into it, an accident that would make the final condition of the patient unsatisfactory.

The whole operation is done in five to fifteen minutes. There is no hemorrhage worth mentioning, no shock, and final results are nearly always entirely satisfactory. The patient is in almost the same condition as after external urethrotomy and needs little care, mostly cleanliness. He sits up a little every day after the

first and is not debilitated by confinement in bed. During the operation the surgeon is in the best possible position to treat stricture in the urethra or stone in the bladder, the prostate and all the bladder are examined by his finger after excising them, and he can equally well remove one or more nodules alone, the whole prostate, a tumor of the bladder or any condition found. It enables him to treat in the best possible manner every complication and is the only operation that does. It leaves the patient with continuous perfect drainage, a sure prevention of urethra fever, which means septicemia, the best cure for all diseases of the urethra, bladder, ureters and kidneys that have developed as a result of the primary condition.

Finally, there is no mortality except that due to old age, the chances being only very slightly increased by a practically bloodless operation of a few moments duration without shock. If it is delayed until the patients are in the last stages of decrepitude some will fail because of that, but if resorted to while the man is yet in good physical condition there is no unusual danger about it. Everyone should recover and be spared years of misery: Whenever a man has to begin using the catheter the operation should be done, because it should be done when safest and most successful and because it should be used to prevent the local disease, the constitutional consequences, and the general suffering that are impending, rather than later as a forlorn hope to prevent approaching death when it can no longer be delayed.

525 LAKE AVENUE.

Cystitis in the Female—Case Illustrating Treatment.¹

By W. L. WALLACE, M. D., Syracuse.

CYSTITIS is said to be much more frequent in men than in women. I am inclined to believe that this idea originated in the day when ammoniacal urine was viewed as the sign and proof of a cystitis. It is now recognised, however, that in only a definite class of the cases of cystitis do we find ammoniacal urine, that is, those with residual urine. As obstruction to outflow is the chief cause of residual urine, and as residual urine soon becomes infected and therefore ammoniacal, and as men suffer more frequently from obstruction on account of the length of the urethra, liability to stricture, and enlarged prostate, it is

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

not strange that we find the variety of cystitis having ammoniacal urine much more frequent in men than in women.

When, however, it is understood that cystitis is an inflammation of the bladder and not a condition of the urine, it must be allowed to be extremely common in women, and certainly is very distressing and obstinate.

CAUSE.

The cause of every cystitis is infection, and almost any one or more of the pyogenic bacteria seem to be capable of producing an inflammation of the bladder. Cystitis ought to be divided into two general classes; first, cystitis caused by infection with germs capable of successfully attacking a healthy bladder; second, cystitis caused by an infection with germs incapable of successfully attacking a healthy bladder. Certain germs, as gonococci, will infect a healthy bladder.

On the other hand, a healthy bladder is invulnerable against most infections. It is able, for example, to contain urine loaded with bacteria excreted by the kidneys in infectious diseases; and ordinary pus germs may be injected per urethram into a healthy bladder almost with impunity. Infection alone will not produce a cystitis, unless with specific bladder germs, as gonococci. Furthermore, an injury will not produce cystitis unless infection supervenes. When we cut into a bladder, intentionally or unintentionally, as in hysterectomy for cancer of the uterus, we trim out any of the wall of the bladder that looks suspicious and then sew up the opening, leaving a catheter in the urethra, as a rule, and it heals immediately by first intention and without a cystitis. And we expect it to heal without a cystitis, knowing that if it does become infected, it will not heal.

An infection is always the cause of a cystitis but, as a rule, the infection is implanted upon some abnormal bladder condition. This condition of the bladder allows and invites infection, and the infection will continue (and recur if cured) until the bladder is normal. A calculus does not produce a cystitis, but if there is a stone present to injure the mucous membrane and prevent the bladder from completely emptying itself, the necessary germs will soon plant themselves in this soil, which has thus been prepared for their growth. Then, while it is extremely important to recognise that infection is the cause of every cystitis, in actual cases, those that we are trying to cure, we must go behind the cause, and search out the conditions that allow the germs to enter and to continue to thrive. We make cultures and easily find the cause, we call it by name and know all about it, as the

bacillus coli communis, but where did it come from? Why did it act? What is the condition that allows the cystitis to continue and prevents our curing it?

We have the *bacillus coli communis*, but have we a stone or a tumor, or a neighboring pus accumulation, or what is the occasion of the cystitis? Furthermore, a bladder, the seat of a long cystitis, becomes damaged by the cystitis itself, so that, even if the original trouble (as a stone or a pus tube) is removed, the crippled bladder cannot now empty itself and the cystitis will persist. In these cases, heroic measures may be required to drain the bladder and put it at rest until it can recover.

Case.—History: Mrs. W., aged 48. Child, 16 years. No miscarriage. First seen September 18, 1902. Complaint: inflammation of the bladder. The cystitis was chronic with frequent acute attacks and was very distressing.

Examination: the patient weighed 200 pounds, was fleshy; rather short of breath. Heart normal. Perineum was badly torn and broken down, vulva red and open, exposing a large red meatus urinaris and a bulging anterior vaginal wall.

Urine, (several examinations): neutral to strongly acid,—1015-1025,—cloudy to clear, no albumin or sugar, *bacillus coli communis* in abundance, almost pure culture.

September 20, 1902, at the hospital, the patient was given ether. A sound was passed and the bladder found free from stone. Cystoscopic examination showed absence of tumor and presence of general redness of mucous membrane. The bladder was small and the walls thick. The uterus and appendages were practically normal. It seemed plain that ruptured perineum, with pouched bladder and exposed meatus, was the source of the trouble. The perineum was therefore repaired, supporting the bladder, obliterating the cystocele and closing the vulva.

The patient was then watched and treated for three months. Drugs were tried and irrigations, and drainage by catheter. No improvement took place at any time. The cystitis persisted, with the *bacillus coli communis* always present. The inflammation was continuous and distressing, and every two or three weeks a very acute and agonising attack, with awful spasms, constant attempts at micturition, with blood at the end of the act, made life absolutely unbearable. Nothing could now be found wrong except the thickened tender condition of the bladder itself.

December 19, 1902, I put the bladder at rest by doing Emmet's operation of cutting the vesicovaginal septum, making the opening large enough to pass the index finger from the vagina into the bladder, and sewing the vaginal and vesical mucous membranes together to prevent closure. This operation was followed by the most acute cystitis, which required heroic doses of morphine and which lasted three days and then gradually sub-

sided. The signs of inflammation disappeared at once and, except for the nuisance of the constant dribbling of urine, she was well; gaining strength and health rapidly.

I left the wound open three and a half months, closing it April 3, 1903. No cystitis followed the operation of closure and the patient has remained well.

CONCLUSION.

In conclusion, I offer a few remarks about the technic of closing the large artificial vesicovaginal fistula, which remained as an oval opening about one inch long by one-half inch transversely. The books say to pare the edge and sew up, or to split the edge and sew up the bladder and vagina separately. It is certainly very difficult to split the edge and separate the bladder and the vagina, and Kelly says that to do this operation a particularly constructed knife, like a scythe, is needed. It occurred to me that it was exceedingly easy to cut the vagina from the bladder when normal, as in a cystocele operation. I, therefore, used a method which I have since tried with great advantage in repairing rectovaginal fistula.

In a cystocele operation, an elliptical incision is made through the anterior wall of the vagina down to the bladder, and the vaginal wall is dissected away, leaving the bladder exposed, perhaps two inches by one inch, more or less. Then silkworm gut stitches are passed transversely, drawing the opening in the anterior vaginal wall shut, just catching into the bladder so as not to leave a pocket. Of course, all tension is on the rigid vagina, any surplus bladder wall is folded up as a ridge in the bladder cavity, and as a fissure toward the vagina, with its two sides in broad apposition.

To close this fistula I operated exactly as if there were no fistula present, and I desired to do a cystocele operation. An elliptical incision was made about three-fourths of an inch beyond the fistula and the anterior vaginal wall easily peeled up and cut away, from the incision to the opening, leaving exposed an elliptical portion of the external surface of the bladder wall with the opening into the bladder cavity at its center. In other words, a large hole was punched through the anterior vaginal wall, overlapping the small hole which existed through the bladder wall. Now, by pulling the vaginal opening shut, the bladder opening was closed without tension, and more than closed, the external surfaces of the bladder being broadly approximated and the edges turned up into the bladder cavity. The silkworm-gut stitches passing across from vaginal wall to vaginal wall are caught into

the bladder, holding this fold together. This method combines the principles of both classical operations. The edges are pared, but the external edge is pared enormously, and the rigid vagina takes all tension from the bladder, lateral incisions being made through the vagina if necessary in order to close the vaginal opening. Much time is saved in splitting the septum toward the edge of the fistula, and in using one set only of temporary sutures.

In this case the bladder was so completely closed without tension, held by the silkworm-gut stitches through the rigid vagina, that I considered it safe; and as I feared cystitis, I did not put in a self-retaining catheter. The patient did not even require catheterisation after the operation, but got out of bed and urinated; at first often (every one to one and a half hours, and then at longer intervals), and soon normally. The wound healed by first intention, and the operation is an illustration of the amount of cutting a bladder will stand without cystitis.

Various Orthopedic Appliances.

By PRESCOTT LE BRETON, M. D.,

Assistant attending orthopedic surgeon, Children's and Erie County Hospitals, Buffalo.

IN photograph No. 1, may be seen a corrective machine for rigid cases of flat foot. The machine was devised by Dr. Robert W. Lovett, of Boston, and the writer obtained one through his courtesy. It is a simple contrivance, so arranged that while the anterior arch of the foot and the heel are held securely in one position, a broad band of strong webbing encircling the tarsus is tightened gradually by screw power. The direction of the force applied is upward and outward, thus restoring the arch of the foot and inverting the forefoot. The head of the astragalus is drawn upward and outward to its normal position. This machine is naturally of service, only when rigidity is present. The use of a plate or raised insole is always contraindicated until the deformity can be passively corrected. Great rigidity and numerous adhesions call for forcible correction under an anesthetic as heretofore, but the after-treatment is facilitated by the use of this machine. The foot is held firmly in the corrected position for ten to fifteen minutes daily, until normal motion is assured. Active and passive movements supplement this treatment and later the arch can be supported.

In the spine and in the foot we find analogous conditions. Numerous small bones and ligaments are concerned in each movement. Just as for the rigid lateral curvatures increased freedom

of motion may be afforded by the action of the screw pressure machine, so in flatfoot this machine will accomplish the desired end and do this more effectually than passive correction with the hands alone.

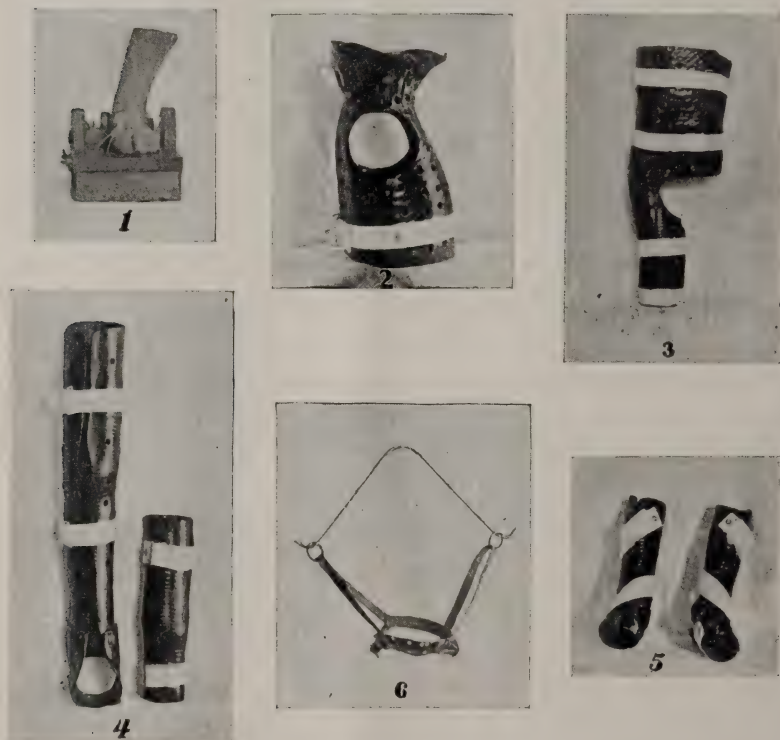
In the other photographs are illustrations of some uses of leather for apparatus besides the conventional leather jacket. The principle of construction is the same no matter for what part of the body the appliance is intended. A plaster-of-paris form is obtained by wrapping the part in bandages and removing the shell immediately. This form is filled with soft plaster and then removed as soon as the soft plaster sets. Correction of the cast follows by a remodeling process if desired. In other words, the plaster is cut away in places and soft plaster added to corresponding portions until symmetry is secured. The cast is wrapped in a light layer of bandage to prevent it from cracking, and all wrinkles smoothed by light tapping with a hammer. A piece of wet leather of suitable size and with beveled edges is wrapped about the cast and wound firmly with window cord or rope until the leather hugs the cast closely. In a few days drying is complete and the leather may be removed and trimmed. It is perforated in many places, sandpapered, and given at intervals several coats of shellac. Bands of webbing with buckles are riveted on at convenient intervals and the apparatus is finished. The inner surface may be lined with chamois, for example, the neck portion of the leather seen in Fig. 2. Portions of the leather corresponding to flexures of joints may need strengthening, also other areas exposed to pressure. This is accomplished by gluing and riveting extra pieces of leather to the original, *e. g.*, the inner side of the shoe seen in Fig. 5. In general it may be said that fixation and protection are furnished by such apparatus, therefore they are indicated mainly where acute symptoms have subsided and extension is not desirable. They are excellent also as night splints, preventing relapse of deformity during the sleeping hours of the patients.

A combination collar and half-jacket is represented in Fig. 2, which is satisfactory in a case of Pott's disease of the cervical region after the inflammatory process has ceased. The leather overlaps at the back and the armholes allow free motion for the arms. The upper part of the trunk, the neck, the chin and the occiput are thus held firmly, but not rigidly. The skin of the patient is separated from the leather by the chamois lining above, and a closefitting undershirt below. A large necktie will cover up the greater part of the leather above.

A hip spica is shown in the next photograph. This is as

useful as the familiar Thomas splint. A high shoe on the opposite foot and the use of crutches are necessary until the patient is convalescent. If extension is also desired a skeleton traction splint may be attached to the leather about the waist and to the shoe below, as advocated by Lovett (*New York Medical Journal*, August 24, 1901).

The long leg splint in Fig. 4, is of service as a night appli-



ance to prevent recurrence of deformity after straightening at the knee-joint, *e. g.*, after a transplantation of contracted hamstring tendons to a paralysed quadriceps extensor. The short support was made for use at night for a case of tubercular knee-joint, a Thomas extension brace being worn in the daytime.

The clubfoot shoes in the photograph (Fig. 5) are also exceedingly useful for night use. Given a case of mild clubfoot where the deformity can be passively corrected by the hands, or a severe case which has been operated upon, the feet will remain in the old deformed position during sleep without some corrective appli-

ance. Leather shoes of this type are comfortable and continue the corrective force of whatever apparatus is used during the day. The plaster cast has to be remodeled and the leather to the inner side of the metatarsus strengthened. In wrapping the cast the leather bunches at the outer malleolus and a V-shaped piece must be removed and the remaining edges united by a tongue of soft leather beneath. The webbing is applied in such a way that on buckling it the foot is everted still more.

The picture (Fig. 6) depicts a very simple imitation of the Sayre suspension apparatus. As this appliance is rather expensive and as numerous cases of spinal affections appear in the hospitals and in private practice where traction on the head in bed is indicated, the writer decided to make several of these. For a few cents the necessary rings, buckles and steel shafting were purchased. Over a plaster cast of a chin was modeled the chin piece. Remnants of leather which had been used for jackets were shaved to a proper degree of thickness at a leather establishment. From these the straps and small pieces were cut, and then soaped to render them pliable. Very little time was expended in fastening them together. One-quarter-inch steel shafting was cut to the proper length and bent as seen in the photograph. In this way can be easily obtained a copy of the Sayre's apparatus which is simple, light and capable of sustaining a continued pull of fifteen or twenty pounds.

20 CARLTON STREET.

Presentation of a Patient, the Subject of Calculous Formations in the Kidney, Ureter and Bladder.

The Other Kidney Inactive; Removal of Stones from the Only Active Kidney by Nephrolithotomy, and from the Bladder by Means of the Operative Cystoscope of the Author.¹

By BRANSFORD LEWIS, M. D., Saint Louis, Mo.,

Professor of genitourinary surgery, Marion Sims-Beaumont Medical College; genitourinary surgeon to the Rebekah Hospital, Deaconess's Hospital, City and Female Hospitals, Mount Saint Rose Hospital, etc.

THIS patient has been the subject of stone formation in his urinary organs to a remarkable degree; and while one kidney has been practically destroyed for some time, and the other one has been opened, cleaned and drained, and various other operations have been performed on him, he is, as you see, apparently in pretty good general condition.

1. Read before the Saint Louis Medical Society, October 17, 1903.

Hugh S. S., until recently a soldier in the United States Army; aged 28; nativity, Tennessee. In sailing to the Philippines in 1899, he first felt the urinary symptoms, that later became very severe. There was frequency and burning connected with urination; and after arriving at Manila three little stones passed from bladder and urethra, one of them lodging at the urethral orifice, and having to be pulled out by a surgeon there. One year later, more passed in the same way. He returned to this country, going to the City Hospital, because of further burning and pain, frequency, and the like, in urination. Dr. Nietert removed a stone from the bladder by suprapubic incision, in 1902; it was about the size of a bird's egg, and is shown herewith. One week later, the patient suddenly felt a severe pain in his right side, running down into the right testicle; it disappeared shortly afterwards, and has not recurred since,—an interesting fact, in view of the subsequent developments.

My attention was first called to him by Dr. Nietert, in April, 1903, when he was passing exceedingly foul, cloudy, purulent urine, slightly acid in reaction. We did double ureter-catheterisation at one séance, draining the urines from the two kidneys at once. In twenty minutes the right kidney sent down ten drams of urine, the left one only one and three-fourths drams. The urine from the right kidney was of fairly good, yellow color, 1008 specific gravity, cloudy from pus, and also contained some blood corpuscles, renal and ureteral epithelia, and a few hyaline casts. The urine from the left kidney was of pale, milky color, highly cloudy, specific gravity 1002, containing large quantities of pus corpuscles, renal and ureteral epithelium, and some blood corpuscles. This finding, especially when taken in consideration with the similar result of another double ureter catheterisation, done on May 5, indicated that the left kidney was doing practically no work; all of the urinary excretory work was being carried on by the right kidney. And yet this right kidney was badly afflicted—not alone with the suppurative inflammation, as indicated from the urine coming from it, but also from the fact that after each of the two ureter catheterisations, a number of small ureter stones passed from the bladder, and in each instance he could feel them pass from the right ureter into the bladder, he said. Some of these stones were caught in cheese-cloth, at the time of urination, and I present some of them to you; the remainder, probably twenty or more, were lost by the breaking of the bottle.

Although the patient felt somewhat relieved after the passing of the calculi each time, there was no clearing up of the symptoms and troublesome conditions present; the urine remained highly cloudy, purulent and foul-smelling; frequency of urination was

excessive, and the patient's general condition was not improving. Believing that more calculi existed in the right kidney, I suggested that an *x*-ray photo be taken, which was carried out by Dr. John Young Brown, at the hospital; the result appearing in the print I show you here. It shows two dark spots to the right of the spinal column, one above the other. These we took to be stones.

The question of removing them, because of the existing conditions, was a serious one. We knew that the left kidney was not functioning to any practical degree: he was depending on one kidney, only, for renal excretion, and that one contained the two stones. If they remained there, it was only a question of time when it, too, would be destroyed and the patient's life would be ended. On the other hand, opening of the kidney, under the circumstances, entailed the risk of causing suppression of urine and having an immediately fatal result; but if he should go through the operation successfully, the chances of recovery would be fair. These matters were candidly told to the patient, who declared that he would rather take the chances offered by the operation than the unfortunate certainty offered by the nonoperative plan.

NEPHROLITHOTOMY.

By courtesy of Dr. Brown and with the assistance of himself and his internes, on May 26, 1903, I cut into the right lumbar region, incised the convexity, pushed my finger down into the kidney pelvis, and felt and removed the stone, which I pass to you. Feeling in the substance of the lower pole of the kidney, I discovered a calcareous mass, not a formed stone, which was removed by scooping with the finger and washing with a stream of water. A flexible ureter-catheter was passed down the ureter, meeting with no obstruction. The major part of the kidney incision was sewed up, enough of an opening being left for drainage by the gauze packed into it. The patient recovered from the effects of the operation with surprising ease and promptness, urine appearing in the bladder on the same evening, and there was only transient rise of temperature. He was up and walking around in three weeks; and gained much weight and strength during the next two months.

Shortly after returning from my vacation, in September, the patient again called on me, complaining of irritation at the bladder neck and frequency of urination; he said he believed there was another stone in the bladder. He has had much experience in this line, and felt that he was in position to judge. On looking into the bladder, I found that he was correct; a white stone of

oval shape, a half inch in thickness by three-quarters of an inch in length, lay in the *bas fond*.

LITHOLAPAXY AND REMOVAL OF FRAGMENTS THROUGH THE OPERATIVE CYSTOSCOPE.

Through my newly developed operative cystoscope, shown herewith, I introduced an alligator forceps, catching the stone and breaking off parts of it, removing them at the same time. The forceps had not been constructed for such work, however, and were not strong enough to break the stone satisfactorily; so the cystoscope was temporarily withdrawn and the stone crushed with a lithotrite; several fragments were washed out through the washing tube; when no more came, the operative cystoscope was again introduced and other fragments were detected and removed. They are shown in the bottle which I present. It was apparent that stone fragments could readily be left in a bladder after crushing and washing, especially small ones, hugged in the folds of the mucous membrane; and that the operative cystoscope would offer much advantage in detecting and removing them. However, there was one, larger, fragment noted in the bladder, which I thought would be interesting to Dr. Brown, so I left it there, for the time being. The City Hospital Medical Society was scheduled to meet at the City Hospital about this time, and we both thought that a demonstration of the stone within the bladder would be of interest to its members; which was made on the evening of September 5th; after which the remaining fragment was further broken and removed through the operative cystoscope, which cleared the bladder of foreign material. The patient has been relieved subjectively since then; although his urine is not yet clear and there are evidences of subacute inflammation in parts of the urinary tract, the pelvis and bladder, especially, for which we expect to give him regular medicated irrigations,—the pelvis being washed directly by means of the ureter catheter, introduced through the catheterising cystoscope.

With the exception of the lithotomy done by Dr. Nietert, and the nephrolithotomy, performed later, all of these various procedures have been carried out with local anesthesia, secured with cocaine. If general anesthesia had been necessary each time, it is probable that material damage would have been done to this sole remaining (so far as functionation is concerned) kidney. The patient is now passing better urine than he has passed at any time since I have been acquainted with him. He is also stronger and in better general condition. He has gained several pounds in weight.

It will be noted that this patient has contributed largely as a subject for developing comparatively untrodden paths of surgical work.¹ The removal of calculi from the ureter by noncutting methods, and the breaking and removal of stones from the bladder through a cystoscope, are methods that, to say the least, have not been undertaken with any degree of assurance, if they have been carried out as a planned attack; and the successful removal of calculi from the only working kidney, is a record that should be of service in guiding other surgeons in a similar situation.

To show that the attempt to remove stones from the ureter, by uretercystoscopic methods, has been attended with an encouraging amount of success during the past year or more, I show you a number of calculi that have been obtained in that way. I shall report the cases together at some later date. Suffice it to say now that, so far, I have had four cases in which intraureter manipulations of various sorts have been followed by the escape of calculi that had been impacted a greater or less length of time in ureters.

The methods I have been working on are as yet immature, the instruments in process of development with plenty of room for improvement, and the problem undertaken a large one; nevertheless, sufficient success has been attained to let us hope that much may be done in the direction aimed at. If it is ever secured, a material step in conservative surgery will be attained. The removal, by a cutting operation, of stones impacted in the ureter, especially in the middle or lower portion, is an operation that is very inviting, even under the best of conditions; and it must be remembered that a large portion of such cases are already the subject of renal infection and degeneration, with heart complications not unusual. Opening a ureter through the peritoneum is precarious, to say the least; and in a corpulent person, to follow the ureter down from the kidney outside of the peritoneum by prolonged incision, or to go in directly through an incision toward the iliac fossa, seeking the ureter in the depths of the wound, are measures attended with much difficulty or even failure. So that, to repeat, there are abundant and emphatic reasons why the ability to remove ureter stones without a cutting operation would be a long step in conservative surgery.

We will hope it may be accomplished.

627 CENTURY BUILDING.

1. Hugh Young, in *American Medicine*, August 9, 1902, details the removal by him, with the aid of a catheterising cystoscope, of a stone located in the orifice of a ureter, in a male patient; and Howard Kelly, in the *Journal of American Medical Association*, March 3, 1900, reports the passage of a calculus from the ureter of a woman, after his dilating the contracted orifice of the ureter by means of sounds. These are the only instances, so far as I know, in which ureter stones were removed with the aid of the cystoscope.

SOCIETY PROCEEDINGS.

The Medical Association of Central New York.

Thirty-sixth Annual Meeting, held at Auburn, N. Y., September 22, 1903.

REPORTED BY C. A. GREENLEAF, M. D., Rochester, N. Y.

THE meeting was called to order at 10.30 a. m., by Dr. JOHN L. HEFFRON, of Syracuse, president.

The first order of business is the reading of the minutes of the last meeting.

Dr. C. A. GREENLEAF, Secretary: Heretofore this report has been printed in the Transactions and it has been customary in the past to omit it, and for that reason I move that the secretary's report be omitted.

Motion seconded and carried.

The president then announced the standing committees. Committee on Credentials, Dr. A. H. Brown, Auburn; Dr. G. G. Lewis, Syracuse, and Dr. Frank Hoxie, of Union Springs. Business Committee: Dr. David M. Totman, Syracuse; Dr. William S. Cheeseman, Auburn, and Edward J. Wynkoop, of Syracuse. Reception Committee: Dr. Joseph F. Creveling, Dr. John Gerin, of Auburn, and Dr. William W. Skinner, of Geneva, and from the Auburn Medical Society, Dr. Sheldon Voorhees, Dr. M. P. Conway, and Dr. S. E. Austin. Publication Committee: Dr. Wm. C. Krauss, of Buffalo; the secretary, Clarence A. Greenleaf, of Rochester, and the treasurer, Dr. William M. Brown, of Rochester.

The treasurer's report was then read.

The Treasurer: I would like to say that in 1900 the treasurer was directed to collect the dues each year from every member, whether he attended the meetings or not. The first year that was not observed, and when I assumed the office I had a great deal of trouble in finding a list of the members of the society. I went back to the old secretary's books and culled out a list as well as possible, but my acquaintance was limited, and since then I have been sending bills to dead people and people who have moved to other parts of the world, and if there are mistakes sometimes in rendering bills I want the members to be lenient with me. I try to collect all the dues that are owing to the society, and I wish that there was some way of getting a more accurate list of the members. There has been no record kept of the deaths,

and I do not know who are members and who are not members. If anyone present has any suggestion to make of any way by which we can get a more complete list of the members, the treasurer will be very glad to hear from him.

The President: What will you do with the report of the treasurer?

It was moved and seconded that the report of the treasurer be adopted. Carried.

The President: The question which the treasurer brought up I think is a very vital one. I happen to hold in my hand the only copy which is known to be in existence of the Constitution and By-laws, and this was printed in 1883. It seems to me that the time is already here when we ought to have a new copy of the By-laws and Constitution, and with them also a list of the membership of the society. A great many changes I understand have been made in the Constitution since this was printed, and I think at the proper time that would be a subject for action on the part of the society.

Dr. J. P. CREVELING: I move that a committee be appointed to revise the By-laws and Constitution, if necessary, and to make a new list of the members.

Motion seconded.

The President: I would like very much if that committee would be nominated by the Association. I am not sufficiently acquainted with the members of the Association who would be active on such a committee.

Dr. CREVELING: Mr. President, I would suggest Dr. John O. Roe, of Rochester; Dr. D. M. Totman, of Syracuse, and the secretary, Dr. C. A. Greenleaf, of Rochester. Motion seconded and carried.

President HEFFRON read his address, entitled, Our Relations to a Few of the Problems in State Medicine.

Dr. Charles E. Congdon, of Buffalo, then read a paper entitled, Personal experiences in puerperal infection.

Dr. G. Griffin Lewis, of Syracuse, read a paper entitled, Keratoconus.

Dr. Lucien Howe, of Buffalo, read a paper entitled, Examinations of the eye which the general practitioner can and should make.

Dr. D. H. Murray, of Syracuse, read a paper entitled, Rectocolonic lavage, with description of new and improved tubes.

Dr. William S. Cheeseman read a paper entitled, Gastro-enterostomy for pyloric obstruction.

The Association adjourned for luncheon, served by the Cayuga County Medical Society.

AFTERNOON SESSION.

The president, Dr. HEFFRON, called the meeting to order in the rooms of the Knights of Columbus, at 2 o'clock.

Dr. William L. Wallace, Syracuse, read a paper entitled, Cystitis in the Female.

Dr. William B. Jones, Rochester, read a paper entitled, The Bladder Troubles of Old Men.

Dr. Nathan Jacobson, Syracuse, read a paper entitled, Contribution to the Surgery of Prostatic Hypertrophy.

Dr. Charles G. Stockton, Buffalo, read a paper entitled, Cholecystitis.

Dr. B. Farquhar Curtis, New York, read a paper entitled, Notes on the Surgery of the Gall-bladder and Ducts.

Dr. F. W. Higgins, Cortland, read a paper entitled, A Plea for the Conservative Treatment of Appendicitis.

Dr. E. S. Van Duyn, Syracuse, read a paper entitled, The Influence of the Leucocyte Count in the Decision for or Against Immediate Operation.

Dr. H. R. Hopkins, Buffalo, read a paper entitled, Malignant Endocarditis of the Right Heart.

Dr. A. L. Beahan, Canandaigua, read a paper entitled, Uterine Myoma.

Dr. Thomas H. Halstead, ———, read a paper entitled, Cerebral Complications of Acute Mastoiditis.

Dr. B. C. Loveland, Syracuse, read a paper entitled, Fat in its Relation to Nervous Disease.

The election of officers for the ensuing year resulted as follows: president, C. A. Vander Beek, of Rochester; 1st vice-president, Charles G. Stockton, of Buffalo; 2d vice-president, A. H. Brown, of Auburn; secretary, C. A. Greenleaf, of Rochester; treasurer, William M. Brown, of Rochester.

The secretary then read the names of those eligible for permanent membership.

Onondaga County.—M. M. Lucid, E. S. Van Duyn, S. E. Crane, W. Coe McKeeby, J. C. Shroudy, A. G. Doust, Nathan A. Munroe, Theresa Bannan, Frederick Flaherty, H. A. MacGruer, L. A. Saxer, J. H. Kerand.

Cayuga County.—Ledra Heazlit, W. H. Coe, Jr.

Ontario County.—C. C. Lytle, W. W. Skinner.

Dr. J. GERIN: I move that the recommendation of the committee be adopted and the several persons received as members of the Association. Carried.

The president declared such members duly elected.

Dr. H. R. HOPKINS: Before adjourning it gives me great pleasure, on behalf of the guests and of the Medical Association of Central New York, in view of the exceedingly delightful entertainment they have received in attendance upon this meeting, to move a vote of thanks to the Medical Society of Cayuga County, and to the Knights of Columbus, for their hospitality in entertaining us. Carried.

Dr. VANDER BEEK: Under Article 18 of the Constitution this Association may at each annual meeting elect two honorary members. Dr. B. F. Curtis and Dr. J. Riddle Goffe, of New York, have honored us by their presence and have instructed us with their work. I therefore move that these two gentlemen be elected to honorary membership in this Association. Carried.

The President: The meeting is then declared adjourned to meet for the dinner at the Osburne House. The hour is appointed for 7 o'clock sharp.

Medical Society of the County of Erie.

Special Meeting, November 9, 1903.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

AT 4.30 p. m. on Monday, November 9, 1903, the Medical Society of the County of Erie assembled in special session in the rooms of the Buffalo Society of Natural Sciences. The president, Dr. ERNEST WENDE, announced that the object of the call was to take appropriate action on the death of Dr. C. C. Wyckoff, which occurred November 7, 1903.

On motion of Dr. J. B. Coakley, the president appointed a committee, consisting of Drs. J. B. Coakley, Lucien Howe, Henry R. Hopkins, D. W. Harrington and Frederick F. Hoyer, to prepare a suitable expression of regard for the deceased.

The committee presented the following memorial:

IN MEMORIAM.

CORNELIUS C. WYCKOFF.

As we meet to mourn the loss of one of our oldest and most respected associates we wish to express our affectionate regard in some tribute to his memory. As a man he always has been identi-

fied with what was elevating and of good repute, active in the interests of the community, and always foremost in his efforts to make the city better and purer and more beautiful.

Dr. Wyckoff was one of the builders of the city, in all that pertains to the medical profession. We honor the work which he has done in assisting in the foundation of its largest hospital, in giving his services gratuitously to it for a large part of his long life, and in identifying himself also, with the interests of other institutions of a similar kind.. We admire, too, his bravery in the days of cholera when he faced death in all the forms which that dread pestilence presented.

Most of all, we cherish the beautiful example he has left as an earnest, quiet and conscientious physician. His life is a record of nameless unremembered acts of kindness and of love. These are graven deep in the hearts of a large circle of patients and friends among whom he has lived for more than half a century. His example serves as a model of the good and true physician, and it is with affectionate remembrances that we spread upon the records of this society this imperfect tribute to the memory of our beloved associate, Cornelius C. Wyckoff.

J. B. COAKLEY,
F. F. HOYER,
H. R. HOPKINS,
D. W. HARRINGTON,
LUCIEN HOWE.

Brief and feeling tributes were paid by many of the physicians present.

Dr. THOMAS M. JOHNSON said that when he began the practice of medicine in 1861, there were about fifty-two regular practitioners in Buffalo, and all were members of this society. Of this number only Dr. John Hauenstein and the speaker remain. Dr. Wyckoff was a member for about forty-six years. He had a large practice, was always active, careful and a typical general practitioner.

Dr. WILLIAM C. PHELPS had known the deceased since 1862 and was much associated with him in practice. He kept clear of most medical dissensions, which were bitter in the earlier periods. He held the confidence of his patients and enjoyed remarkable health and activity throughout his long career.

Dr. WILLIAM WARREN POTTER said it is vouchsafed to but few men to live the life or die the death of this physician, whose taking off we now lament. Dr. Wyckoff as a physician had the respect and love of his patients, as a citizen he performed his duty in the community in which he lived, and as a man he represented all that could be desired by the idealist. He regularly attended

the meetings of this society, and his familiar figure will be missed by every member.

Dr. CONRAD DIEHL knew him since 1862, and as a colleague since 1866. He spoke of his professional courtesy towards his fellow practitioners.

Dr. J. B. COAKLEY described the beautiful tributes paid Dr. Wyckoff by his patients in their evidences of love and affection, and told of his personal loss as a friend.

Dr. LUCIEN HOWE called attention to the large gathering of physicians who had come to this meeting by a common impulse to pay their tribute and show their respect.

Dr. CHARLES S. JEWETT spoke for the younger members of the profession, and alluded to his recent intimate association with Dr. Wyckoff at the Home for Old Ladies.

Dr. FREDERICK F. HOYER said Dr. Wyckoff was his oldest friend in the medical profession, having known him for over fifty years. He emphasised his personal loss.

Dr. WM. C. KRAUSS said that the one thing that impressed him most was the fact that Dr. Wyckoff grew older gracefully. Even in old age he seemed the embodiment of youth.

Dr. D. W. HARRINGTON stated that Dr. Wyckoff was the first physician appointed on the staff of the Buffalo General Hospital in 1858, remaining on the regular staff until a recent date when he was transferred to the consulting staff.

Dr. HENRY R. HOPKINS said it was easy to be calm in prosperity but difficult in adversity. The deceased met the most serious test with the highest possible dignity and manhood.

Dr. A. H. BRIGGS related incidents of the last meeting with his departed friend.

Dr. IRVING M. SNOW remembered Dr. Wyckoff from early youth as having made his calls on horseback, a custom which he continued to the end of life. His age seemed to come gradually.

Dr. WETMORE added a brief tribute after which Dr. Krauss suggested that members meet at his office and attend the funeral of Dr. Wyckoff in a body.

Buffalo Academy of Medicine

Section on Medicine, October 13, 1903.

REPORTED BY WM. IRVING THORNTON, M. D., Secretary.

The regular meeting of the medical section was held Tuesday evening, October 13, 1903, at the Academy rooms, in the Public

Library Building. The meeting was called to order at 8.45 o'clock by the chairman, Dr. ARTHUR W. HURD.

The minutes of the last meeting, held September 15, 1903, were read and approved.

Dr. DE LANCEY ROCHESTER presented a paper, entitled:

THE TREATMENT OF PNEUMONIA.

In opening he emphasised the fact that pneumonia was not to be considered a local disease of the lung only, but rather from its etiology, symptomatology and course a general systemic infectious fever. The first indication in treatment is the relief of toxemia. This is best brought about by means of catharsis, produced by salines or small doses of calomel, and by active diaphoresis. The latter indication is best met by the hot mustard foot bath, which is employed at intervals of 4 to 6 hours, and is continued from 30 to 45 minutes at a time, great care being taken that the patient is disturbed as little as possible and protected carefully from exposure. On account of the disease being so frequently complicated by nephritis, diuretics and added strain upon the kidney were considered inadvisable.

The diet is to be largely of liquids, either predigested or of easily digestible material. Large volumes of water are to be taken, but in small quantities at frequent intervals. In speaking of the local treatment of the lung conditions all applications of poultices and similar means were disapproved. The chest is to be protected by a woolen jacket. The frequent examination of the chest was urged and evidence of edema or spreading congestion to be met by the prompt application of leeches or by cupping. Applications of ice to the chest have been found unsatisfactory.

As soon as the diagnosis is made the condition is to be treated by moderate doses of strychnia, the dose to be increased as the disease progresses and the condition of the patient demands. The use of diffusible stimulants, such as alcohol, ammonium, carbonate and acetate and aromatic spirits of ammonia was commended.

To relieve the embarrassment of the right heart, bleeding alone or combined with hypodermoclysis of normal saline solution is useful. Digitalis carefully employed is of value in some cases, but its indiscriminate use was branded as irrational and unscientific. Some cases were reported treated with antipneumococcic serum, but he had not observed favorable results from its use.

Dr. Rochester reported nearly two hundred cases of pneumonia treated in private and hospital practice with most gratifying results, the mortality rate reported being but 5.55 per cent.

The paper was discussed by Drs. A. A. Jones, Grosvenor, Taylor, Schroter, Kennerson, Borzelleri, Fronczak, Stockton, B. G. Long, Wasdin and Van Peyma.

Dr. WILLIAM C. KRAUSS presented a short paper, entitled:

HYDROCEPHALUS—AN ATTEMPTED CLASSIFICATION.

He dealt briefly with the various varieties of the disease, speaking of the chief pathological states which produce the condition. He divided it into the following classes: acute—external, internal. Chronic—congenital, acquired.

Members present, 45. Adjourned at 10.30 p. m.

SELECTION.

Was it Wise for the American Medical Association to Change its Code of Ethics?

By D. W. CATHELL, M. D., of Baltimore, Md.

AT THE last annual meeting of the American Medical Association, held at New Orleans, May, 1903, its old code of ethics was changed by the following action: The Special Committee on "Revision of the Code of Medical Ethics," composed of Dr. E. Eliot Harris, Dr. William H. Welch, Dr. J. D. Bryant, Dr. Nicholas Senn, and Dr. T. J. Happel, after agreement with a larger committee, composed of one member of the House of Delegates from each state, submitted a preamble that provided that whatever might be the form of the document adopted to replace the old code, its sphere should be suggestive and advisory only, and not compulsory. This preamble was unanimously adopted.

The same committee then submitted a body of medico-moral precepts entitled, "Principles of Medical Ethics." The Association, through its house of delegates, also promptly adopted these principles by a unanimous vote, which was followed by great and prolonged applause, showing complete unanimity on the subject, and today one of the questions before all thoughtful medical men is: Was it wise for the American Medical Association to change its code of ethics?

That this change inaugurates a better and wiser policy for the profession of our country, I am quite sure, for the following reasons: although the moral sentiments of the old code had done good in the early years of its existence, by binding our profession together and drawing a line that excluded many unworthy persons

from recognition, yet the conditions that then existed have gradually changed, until now our only opponents of any number are the homeopaths, a body of educated men, physicians under the laws of the various states, men of good professional character, correct morals, and much esteemed by those who know them best. In dealing with such men the old method of 1847 was no longer the wisest plan and chiefly on this account from these principles, the nonconsultation clause was omitted, thus relagating to each and every physician the right to follow the guiding impulses of his own judgment whenever the important subject of consultation arises.

The reason why we could not previously consult with outsiders was that since 1847, consultation with them was specifically forbidden by the code of ethics of the American Medical Association, and every member waived his natural right to do so when he joined that body or any subordinate society. This restriction being now removed, every individual's right to consult with whom he pleases is again restored, and our new principles encourage the exercise of this right in the following words: "The broadest dictates of humanity should be obeyed by physicians whenever and wherever their services are needed to meet the emergencies of disease or accident."

Among the chief reasons for this change from "code" to "principles," was that the old code's authority and its usefulness had decreased year after year until many of the best of our number had become either lukewarm or hostile toward it. Many good men have never even read it, and everybody knew that it no longer stood as an honored and efficient guide. Besides, the chief evils it was intended to correct had either disappeared or got beyond its reach. Indeed, had its boycotting features been set aside forty years sooner, it would have saved our profession many dilemmas and many mortifications, for medical boycotting is a bad thing when it does not work, and the events of these forty years have proved that it was an unwise method in dealing with the homeopathic portion of our foes, and one that had a directly opposite effect from that which was intended—namely, to exclude all who held to Hahnemann's or anybody else's dogmas from membership in our societies, and thereby prevent dogmatists from using them to gain a foothold with the public. This all our enemies forthwith stigmatised as "persecution," and we were at once everywhere denounced as "allopathic persecutors."

I shall surprise you by the following statistics of what their battle against this so-called "persecution," has done for our homeopathic brethren in the United States. The medical profession

of all other nations protested against or laughed at it, while we were the only country in the world which built a "Chinese wall" against them.

The *North American Journal of Homeopathy*, for September, 1903, tells us that in the year, 1900, there were in the world 10,635 homeopathic physicians distributed as follows: In Great Britain and Ireland 201, or one in 203,000; in France 211, or one in 192,000; in British America 87, or one in 64,000; in Uruguay 7, or one in 133,000; in Switzerland 22, or one in 151,000; in Australia 29, or one in 155,000; in Spain 118, or one in 163,000; in Belgium 41, or one in 164,000; in Holland 17, or one in 300,000; in Denmark 8, or one in 306,000; in Mexico 32, or one in 423,000; in Brazil 33, or one in 428,000; in Barbadoes 5, or one in 38,000; in Italy 42, or one in 772,000; in Argentina 6, or one in 809,000; in Russia 66, or one in 1,608,000; in Portugal 3, or one in 1,674,000. There were also 14 in all India, 2 in all China, 1 each in all Cape Colony, in all Sweden, and in all Venezuela, as well as 3 in the Hawaiian Island and 1 in Alaska. Also, in Germany, where both Hahnemann and homeopathy were born, he in 1755, and it about 1790, there were in the year 1900, in all Germany, only the ridiculous number of 290, or one to every 194,000 inhabitants, while in our United States of America, where our profession adopted a nonintercourse policy almost as soon as homeopathy had reached our shores, we had in 1900, no fewer than 9,369 persons who called themselves homeopaths, or 1 to every 8,000 inhabitants—88 per cent. of all in the world; all fat, all thriving, and all fervently hoping that our good old prohibitory clause would long continue to assist; but, alas! for their hopes, this was the very knot on which our Alexanders used their sharpest swords in May last at New Orleans.

We, of today, can easily see that if in the beginning, instead of making this question a cause for rejection or expulsion, our predecessors had welcomed into fellowship such of these men as were educated and lawfully qualified, homeopathy would never have been raised into the dignified position of a rival school, and we would never have had to ask the public to choose between them and us; because they could not have raised the cry of "persecution," and without this there would be today no existing homeopathic medical societies, no homeopathic medical colleges, no homeopathic medical journals, no homeopathic hospitals, and the puzzling question how to deal with them would not be now confronting us. Even had we done this 30 years ago, neither the homeopaths, nor the eclectics, nor any other important rival would now exist, except in the forgotten pages of history.

This change of base is the most momentous step the American Medical Association has ever taken, for it removes all the restriction that separates the ins from the outs in consultation, and gives back to our specialists, our surgeons, our professors, and all other medical men, the right to consult, or not consult, with Dr. Heterodox, Dr. Homeopathy, Dr. Eclectic, or Dr. Anybodyelse, whenever any sufficient motive prompts. In such consultations we nonsectarians can hereafter meet our rivals face to face everywhere, whether in city, town, village, or rural district, and incidentally show our superiority where we are superior, fearlessly depending for the final solution of the great question of KIND, on the irrefragable law of the survival of the fittest.

But, Dr. Doubter or Dr. Oldcode may ask: If the Principles of Medical Ethics have no binding force, what is their use? My reply would be: These principles are intended to give correct and uniform suggestions and advice to the host of new members who are constantly entering the profession, and to all others who may feel the need of their admonishing precepts.

This being their only function, in my opinion, a better title and one that would plainly show to the whole world their source of origin and their nonproscriptive character would be: "*Ethical Principles that should Govern the Medical Man.*" FORMULATED BY THE AMERICAN MEDICAL ASSOCIATION. This question I respectfully submit.

I also believe their features should be improved and made more modern by expurgating the paragraphs on Visits to the Sick, Respect to Seniors, Tenderness to Patients, Arbitration in Consultation, Attending One's Own Family, and the like, and adding tenets more abreast of twentieth century conditions. The document should also be simplified by abolishing the ancient and useless chapter arrangement, and the subtitles, and by rearranging and numbering its various paragraphs.

Now, barring the consultation question, what did our governing code do for us during its last 25 years that the unwritten law that governs gentlemen could not have done? Or I will put the thought in a different way: Can anyone show me a medical man who, previous to the seventh day of last May, could be depended on to do the right thing with a code hanging over his head, who cannot now be depended on to do it without one? No, because no code can specify unfailing rules for being a gentleman or put correct principles in anyone's heart if the instinct is lacking. On the contrary, so far as my observations extend, ungentlemanly acts are far less frequent in all circles in which a sense of personal honor is the incentive; and if this be so, individual responsibili-

ties for personal deportment will henceforth be felt among medical men more strongly than ever, and a more refined and gentlemanly intercourse will surely follow.

The paragraph of the code interdicting consultation with outsiders was always contrary to the judgment of the press, the bar, the pulpit, and the people, and all our arguments were never able to efface the general belief that we were a narrow-minded and illiberal sect who held *ethics* above humanity, and no one ever assigned "*the code*" as a reason for refusal to consult, that convinced a suffering man or anybody else that this restriction was not brutal and unfeeling, and it was not our code's fault that a larger portion of the public did not angrily desert from us to "the persecuted."

Above all else, this change of base frees us from the old charge of bigotry, and brings up new and nobler issues, for this was the vulnerable spot in our armor at which our enemies of every kind directed their partisan attacks. Indeed, nowhere in the annals of human invective is recorded a more vehement, or a more continuous, or a more successful attack than the combined armies of all these "persecuted martyrs" made on this paragraph year after year, with the public as judges, with "allopathy," "old school," "crucifixion," "persecution," "jalap," "calomel," "salivation," "bleeding," "manslaughter," and a whole hatful of other fulminating nouns and adjectives added to make it expressive. But all their literature was as nothing compared to the thousands of unfair and partisan tales told at the bedside, in the parlor, and on the curbstone to every man, matron and maiden who would listen to their harangues.

They even carried their attacks into all public questions and contested for army appointments, naval appointments, and political appointments; everywhere crying "persecution;" and so deeply did their missiles penetrate the public heart that some of those who were lured away from us 40 years ago are today a hundred times more bitter toward "allopathy" and the "allopaths" than their medical attendants are, and would trust their lives to an empty-headed outsider a thousand times sooner than to the best "allopath" in the world. And there are at this moment people in every large community who would almost rather die under the care of an irregular than to get well under the hands of a regular. Why? Chiefly, because that paragraph shut out the eclectics, homeopaths, thompsonians, and others, and kept them incessantly appealing to public prejudices, and in this way the code acted constantly and powerfully in favor of the very ones it was intended to destroy. These terrific attacks on us caused

hundreds of thousands of valuable lives to be entrusted to irregular care, and millions of dollars to go into their pockets, while our clansmen "Megafied" by an overdose of "Magna Codex" sat in their arm chairs and slept as unconcerned as Rip Van Winkle, and thrice as long.

With popular sympathy doing so much in their favor for fifty years who would be so foolish as to expect our fat rivals voluntarily to abandon their banner, unless new conditions made it more profitable to do so? Ask a merchant, or a bootblack, or anyone else to desert a lawful occupation that is yielding him a good income, and what will his answer be? "Never, unless something better offers." This one is not paying now, as of yore.

More especially were homeopathy's camp-followers, and the eclectics and the host of irregulars of other creeds who were poorly equipped in the essentials of medicine, satisfied with the partisans and the full purses our "Chinese wall" brought them, and also with the Gibraltar it afforded their defects, against the exposure that consultations and comparison of scientific equipment would bring. This great step on our part will now compel every opponent to stand or fall by what he is, and will force expansion on all among our rivals who can and will expand beyond a limited creed. It will also bring Chinese stagnation to those who cannot or will not, while to all the interests of unfettered medicine it will be like a ladder let down from heaven.

Hahnemann's followers have certainly thrived most where most assailed, as the profession of New York, Philadelphia, Boston, and other parts of New England, Baltimore, Cleveland, and elsewhere can all attest. Now, with this battered target removed, our profession in America will be rid of its greatest hindering weight, and our opponents of today will be gradually transformed into worthy friends, possibly their societies, and colleges, and hospitals, and medical journals into auxiliaries, and we will finally see a union of all true physicians from ocean to ocean. No honest man can compromise on a question of principles, but a consultation, whether with Dr. Newkind, or Dr. Oldkind, is not a question of principle at all, but clearly a matter of humanity and business combined. If we nonsectarians be qualified and honest men, the half we supply in a consultation will be both rational and valuable, and if the half our confreres supply is either erroneous or valueless, it is their fault and not ours.

When we recognise an outsider as a physician it does not require us to endorse either his crotchets or his dogmas, nor has any honest man practising a limited creed anything to fear from meeting one who does not, as truth wherever found has nothing

to fear from error. We nonsectarians, with our boundless field of therapeutics, naturally stand on a broader vantage ground and see much to condemn in our opponents, but gentlemen, withal, let us be modest in our claims, for we ourselves are not yet scientifically perfect, our enemies still find much in us for criticism, and there is not a specialist nor a surgeon nor a consultant of any kind anywhere who has not discovered by actual experience that ignorance of this or that well-known medical truth is not confined entirely to irregulars.

As to the moral aspect of mixed consultations: What physician does not come in frequent contact with the vile, the vicious, and the ignoble? Is anyone thereby necessarily contaminated? Not at all! Would it not be equally foolish, or even more so, for anyone to say that if a well-qualified physician gives his advice or his aid to an ignorant one, or even to a medical fool or a knave, and thus aids him in preventing suffering or in saving life, he thereby necessarily descends to that man's level, or degrades our noble calling? To all such assertions I would answer—no. In the name of God No! No!

The occasions will probably always be few in which the patrons of a well-equipped regular physician will ask him to call a sectarian in consultation, but if such a course becomes necessary it should be done without passion or prejudice, and with but one end in view, the good of the patient. After a while, when things change and animosities have died out, we nonsectarians will probably be frequently called to meet every variety of outsiders, and these opportunities for making a more accurate diagnosis, or detecting complications, or pointing out errors, or suggesting better therapeutics, or giving manual aid in difficult cases, or adding good of any kind cannot fail to save thousands of valuable lives, and to show our better equipment and our greater usefulness, and thus nine discerning people will be brought toward us where one will turn away, and the oftener this comparison is made the sooner will all question as to WHICH IS BEST be banished.

How will our change of code affect society membership? According to the estimate of Dr. Simmons, there are today in the United States, 77,000 physicians who for one cause or another, do not belong to medical societies of any kind. Of these each state has its full quota, and one of the benefits that should follow our change of code is an increased membership in this faculty and also in our local societies, because there are numerous persons who are perfectly eligible who doubted their ability to measure up to the code's requirements; others who dissented from this restriction or that feature, and would not affiliate; others knew the code

was binding on every member of every society, and would not put themselves under its yoke for fear of unwittingly rendering themselves liable to unfair trial by rivals or enemies; others wished to keep out of code wrangles, and to hold themselves responsible to their own conscience alone, and therefore kept aloof from fellowship; others had no respect for the effete nonintercourse laws of long ago, and would not fraternise under them, as shown twenty years ago by the angry split in the Medical Society of the State of New York. Now, after this great and mollifying change of code we ought to have improved unity everywhere, and see increased membership. Where is the Welch, or the Osler, or the Ashby, who will essay this task among those who are delinquent in Maryland?

There will be another important result: the code has for years kept many who hold but loosely to *similia* from making its therapeutic bugaboo a secondary matter, and entering our broader nonsectarian field. We all know that the majority of the prominent men who are now known as homeopaths are much more lukewarm toward its restricting tenets than their predecessors were, because their education, talents and dispositions are too liberal to remain confined to the limits of any one creed, and many of these will now gradually throw off their sectarian shackles and finally be found enjoying the wider field with us, because they are no longer ostracised, the finger is no longer pointed, and the cry of "outlaw" is no longer heard. Indeed, we and their more scientific representatives are even now not nearly so far apart as many suppose. At the annual meeting of the American Institute of Homeopathy, held at Cleveland, Ohio, June, 1902, in a learned annual address on "The Present Status of Homeopathy," the eminent president, Professor James C. Wood, after enumerating seven different classes of cases, each presenting indications for therapeutics, which he admits Homeopathy does not reach, concludes by saying: "The legitimate sphere of action of homeopathy is—the curing of diseases which are curable by the principle of substitution."

To put it all in a paragraph: the president of the chief homeopathic medical body of America, divides the structure of therapeutics into numerous stones and merely claims that *similia* is one of these, not even that it is the foundation stone, not even that it is the keystone, but only that it is one of the stones. I ask in the name of Hippocrates, what regular physician on earth would object to his next door neighbor, or even to his own brother, for holding these tenets if he wishes, or for following this, that or the other therapeutic line he chooses; but were he our brother we

would probably lay our hands gently on his shoulder, and beg him for humanity's sake not to chain himself to any one segment of the therapeutic circle.

The educated homeopaths of today differ radically from their predecessors in numerous ways and are now shoulder to shoulder with us everywhere, in obtaining and maintaining salutary medical laws to shut out ignorance and quackery, and are fast approaching us in many other respects. The truth is, the chief difference between the majority of their 9,369 and us today, is not the question of therapeutics, but merely in name and affiliation, and I firmly believe an honest show of liberality on our part will do much to make this disappear, and to cause many to drop their dogmatic titles and throw off their sectarian chains and enter the broader and nobler sphere expressed all over God's world by the single word, *physician*.

Every thoughtful son of Esculapius knows that true medicine is an unfettered profession, therefore while we earnestly desire unity with all worthy men, our mountain cannot go to anybody's Mohammed. The reason why is well expressed in Section I, Article 1, of Chapter II of our "Principles of Medical Ethics," which says: "It is inconsistent with the principles of medical science, and it is incompatible with honorable standing in the medical profession for physicians to designate their practice as based on an exclusive dogma or a sectarian system of medicine." Let us be liberal in all else and this broader and better course in therapeutics will finally be adopted by all.

I am neither an enthusiast nor a rainbow chaser, nor do I believe abolishing the code will at once bring prodigious results, but as sure as day follows night, results great and good will come, and those who are working in the Esculapian field 15 or 20 years hence will see the great benefit that will result to us and to them from the passing of the conditions created by our old code. The American Medical Association has left to the state organisations discretionary powers in deciding who are, and who are not, eligible to membership in them, and in their subordinate societies. It also leaves them the right to adjudicate for themselves all other ethical questions, and among the first duties now before us is promptly to put the Medical and Chirurgical Faculty of Maryland in line with our great national body.

Finally, the sooner you and I, and every other physician in America do our part to let the whole world know that our profession has changed the tomahawk for the olive branch, the sooner will we create a vastly improved public opinion, and the sooner will we enter on a long era of peace, good will and prosperity.

But medicine is a diversified profession, and in its rank are naturally found, many men of many minds, and no reasoning person can expect all to agree fully that it was judicious to change our venerated grandfather's code, and some may even think it was a huge mistake, but, after studying the whole subject, I believe that it was an exceedingly wise act, and, I humbly predict that it will have at least 5 excellent results: it will free us from the old charge of bigotry; it will kill the false cry of persecution; it will have a great and far-reaching effect on all our material interests; it will everywhere promote and foster professional unity; and, far above all else, by putting an end to partisan agitations it will increase the good repute of every worthy medical man in America.

ABSTRACTS.

Treatment of Puerperal Sepsis.

SEVERAL papers have been published recently on this subject and we present three of them in abstract.

Prof. H. Fehling, of Strassburg University, in a paper on The prophylaxis and treatment of puerperal fever, *Muenchener Med. Wochenschrift*, No. 33, August 18, 1903, says:

That operative procedure in this infection being of comparatively little use, the search for systemic remedies to neutralise the general poisoning has been unremitting. There can be no doubt, he continues, that collargolum, intravenously administered, is of value. Sterile 2 per cent. solutions were employed, $2\frac{1}{2}$ to 5 drams thereof being injected with a fine needle into a vein at the elbow-bend. With a little practice this is easily done. There was never any ill effect. The results varied; some charts showed an immediate fall in pulse and temperature, sometimes a very considerable one, and it is especially noteworthy that this was always accompanied by an improvement in the patients' condition. They slept and had better appetites. When the temperature rose again, fresh injections were made, these being often administered daily for 8 or 10 consecutive days. A definitive fall of temperature after one injection occurred once.

In some cases death occurred in spite of the injection. In others the fatal termination was postponed, as in a case of pyemia with numerous pulmonary abscesses. The remedy seems to possess the power of depressing the temperature and the pulse; and it has a certain diagnostic value in addition to its good effect upon the patient. Fehling is decidedly of the opinion that collargolum

should be employed in the treatment of puerperal fever, though further experimentation in the clinical field is desirable.

Dr. Hiram N. Vineberg, New York, (*American Journal of Obstetrics*, September, 1903), in a paper with a similar title says:

In a patient whom I had under observation a couple of years ago, and who was ill for a long time, I made the diagnosis of septic thrombosis of the pelvic veins on the right side. The patient was very seriously ill, had repeated severe rigors, followed by high temperature. The uterus behaved normally and involution progressed as it should. There was no pelvic exudate, but I could feel a round, hard cord along the infundibulopelvic ligament; the adnexa were apparently normal; there were no signs of peritonitis. At one time during the illness a prominent internist who saw the patient in consultation concurred in my diagnosis of pelvic phlebitis and thought he found evidences of septic endocarditis. The patient was in a precarious condition for weeks, but finally made a good recovery, the treatment consisting of the usual stimulating and nourishing agents employed to combat sepsis, together with free inunctions of unguentum Credé. There were no external metastatic abscesses. There was no bacteriologic examination made of the uterine discharge, for the reason that when the sepsis became manifest, which was rather late in the puerperium, there was practically no discharge from the uterus. I had reason to suspect a gonorrheal infection, as the husband had suffered from an acute attack of gonorrheal urethritis a short time before the wife conceived, and during the early stages of the pregnancy there was a marked erosion of the cervix with a copious mucopurulent discharge.

It may be appropriate here to say a few words in reference to the use of collargolum or unguentum Credé. I am in the habit of using unguentum Credé in cases of sepsis where I can find no lesion which demands surgical intervention, or in those cases in which the gross source of infection has been removed by surgical means and the manifestations of sepsis still persist. I have gained the impression from its use that it is of some service, either in aiding the system to eliminate the toxins produced or in some way counteracting their deleterious effects. Certain it is that several desperate cases in which the silver was employed by inunction ended in recovery, and it did seem to me that the favorable results were in a measure induced by the inunctions of the silver.

Before closing I desire to lay especial emphasis on the importance of watching very carefully every puerperal woman who shows the slightest elevation of temperature. If it be assumed that such elevation denotes sepsis, unless some other cause unmistakably accounts for it, and the proper treatment instituted at once, then, in my opinion, it will rarely occur in private practice

that a case of puerperal sepsis will be encountered in which any serious surgical intervention will be needed.

The third paper is by Dr. J. Bamberger, Kissingen, Germany, (*Berliner Klinische Wochenschrift*, August 24, 1903). Among other things he says:

In the following lines an attempt will be made to elucidate the manner in which collargolum acts, without referring to its efficacy, which has been abundantly confirmed by numerous authorities. That its action is not bactericide was demonstrated by Brunner and Cohn; and Bamberger's own experiments also established this. Cohn showed how rapidly the silver, introduced intravenously, is distributed throughout the organs; a fact which had already been proved by Siebel for indigo, ink, and the like, and which Bamberger himself corroborated with frogs by subcutaneous collargolum injections.

A collargolum injection is therefore to be regarded as an introduction into the system of extremely finely divided particles of silver. That important changes in the blood occur from such an injection may be assumed; for an enormous number of leucocytes must be concerned in removing the precipitated silver from the blood. These leucocytes certainly lose their usefulness in the body economy and leave the organism laden with silver, being excreted in the feces and in other ways. To replace the missing leucocytes, the blood-forming organs must necessarily produce new ones, which then take part in combating the infection. Leucocyte formation is stimulated by the toxins; and this stimulation is further enhanced by collargolum.

The impartial observer must be absolutely convinced that collargolum does give practical results, animal experimentation to the contrary notwithstanding. That there has been no success in some cases is probably due to the fact that it was used too late to stimulate the formation of new leucocytic hosts. In animal experiments a relatively large amount of infectious material is introduced directly into the blood current; and these violent infections are not properly comparable to infections which occur in everyday life, where the germs often get into the blood late and often not at all. Under the natural conditions the body has more time to take protective measures against bacterial invasion; and a well-timed collargolum injection will help the organism powerfully, though, indeed not through any bactericide properties of the drug.

Another legitimate criticism to many animal experiments is that the collargolum was injected before the infective material. Thus the infection reached the blood at a time when a large proportion of the leucocytes was busied with the silver particles and the organism was robbed of an important element of protection. Beyer waited with his collargolum injection until the animals

showed signs of violent sickness; and they got well. Animal experiments made by Bamberger showed to what an extent the leucocytes are engaged in carrying off the grains of silver injected subcutaneously.

In order to prove practically his theoretical conclusion that after a large portion of the leucocytes have left the system, stuffed full of silver, an important leucocytosis occurs, Bamberger inuncted for 30-35 minutes 45 grains of the ointment on his leg, repeating this three times. Nothing was eaten between each inunction and blood count. The following table gives his results:

	No. of leucocytes before inunction.	15 minutes after.	2 hours after.	5 hours after.
First inunction.....	3,700	3,100	2,500	5,000
Second inunction.....	4,700	3,300	3,000	5,200
Third inunction.....	4,500	3,400	3,300	6,300

Theoretically, a direct bactericide action of the silver can only occur when abscess formation has set in. Silver-laden leucocytes would probably be found among those called forth by the inflammatory reaction, for metallic silver hinders bacterial growth in its immediate vicinity. It is possible that a part of the efficacy of collargolum may be due to its catalytic properties as a colloidal metal.

Leucorrhœal Discharges; their Causation and Treatment.

By CLARENCE G. CLARK, M. D., New York.

THE vagina is seldom, if ever, the seat of idiopathic inflammation. Vaginitis is always either due to some specific cause or is secondary to some contiguous inflammation. Vaginitis may be classified according to duration as acute or chronic; to causation, as erysipelatosus, diphtheritic, gonorrhœal, and traumatic. The inflammation may also be general or circumscribed, but is usually the former. In this as in all other forms of inflammation there are present the cardinal symptoms of rubor, calor and dolor, or redness, heat and pain. The pathology differs slightly in the various forms. In general there is congestion, transudation of serum, premature exfoliation of epithelium and in well defined cases, the formation of pus. The vaginal membrane resembles more closely the structure of the skin and, therefore, vaginitis is more like dermatitis in character and occurs either as erythematosus, purulent or exudative, but never as purely catarrhal. Only in the advanced cases of leucorrhœa is pus found in any quantity, the disease progressing rapidly from a simple congestion with a thin serous discharge to an exfoliative vaginitis with copious discharge of serum, mixed with epithelial cells. Only in the gonorrhœal forms is pus found from the start.

Simple vaginitis is common especially in women in delicate health and of strumous diathesis. This form is not as marked as those due to some contiguous inflammation. Metritis is almost always accompanied by a leucorrhœal discharge. Subacute and chronic inflammation of the vagina may be caused by an inflammation in the immediate neighborhood of the canal, as dysentery or erysipelatous inflammation of the vulva or anus. The discharge of a simple vaginitis differs from that of a vulvitis in being less tenacious. Microscopical examination will aid in the diagnosis greatly. Only in the gonorrhœal, erysipelatous, and diphtheritic forms are distinct microorganisms found.

Among the symptoms of the simple form may be mentioned first a feeling of heat and fulness in the vagina. In severe cases vesical cases, vesical and rectal tenesmus are frequent. Often there are constitutional symptoms, fever and loss of appetite. If great cleanliness be not observed, the discharge decomposes and gives rise to an offensive odor. In subacute and chronic forms the symptoms are same in character, but less in degree.

Treatment.—Under this head I will only discuss the treatment of the simple leucorrhœal discharges which, if taken at their outset, may be easily controlled and more serious complications prevented. Before the treatment is started the cause should be discovered and treated. For the discharge itself treatment is purely local. Medicinal applications may be applied in one of two ways,—as solutions used in douches or on tampons, or in powder form. I have found a combination of these to be the best, using both liquid medicinal agents and powders and employing both tampon and douche. In both tamponing and douching I have found that glycothymoline gives prompt results. Various powders may be used. In subacute and chronic cases I employ markasol (bismuth borophenate). The treatment is carried out as follows: first, the entire canal is cleansed with a douche of glycothymoline and warm water in proportion of 1 ounce to the quart. Next, the canal is thoroughly dusted with the powder desired and a tampon of borated cotton inserted. This is removed at the expiration of 24 hours and the canal is again cleansed. I generally increase the strength of the douche from day to day. In cases where the discharge is especially profuse and seropurulent in character, the powder is not used at first, but the canal is douched twice daily and tampons saturated in glycothymoline inserted. For this I use one part of the medicine to four of water.

To further illustrate, I will quote two cases, recently treated:

Case I. Miss M. F., aged 21; presented herself August 25, 1903, complaining of discharge from vagina, which has been

gradually getting worse. She described a sensation of fulness and heat in vagina and burning on urination. Examination—Patient in poor general health, and with indifferent appetite; menstruation irregular; complexion sallow and anemic. Vagina sensitive to touch and walls covered with serous discharge. Labia slightly excoriated. Under the microscope discharge is composed chiefly of epithelial cells and few leucocytes.

Treatment.—Douched patient with glycothymoline and water 1-20. After thoroughly cleansing the vagina of all discharge, it was dusted with markasol and a tampon of borated cotton was inserted. Blaud's pills were administered. This treatment was continued for ten days, at which time the discharge was greatly diminished. I then discontinued the powder and prescribed douches of glycothymoline and water in proportion of 1 ounce to the quart, to be used twice daily. After about three weeks the patient was entirely free of discharge, menstruation was regular and general health much improved.

Case II. Mrs. H., April 23, 1903, complained of painful menstruation, with a copious discharge between menstrual periods. Married five years, one child, two years old. Forceps delivery. Had no trouble prior to birth of the child. Vagina was filled with mucopurulent discharge. Cervix lacerated, uterus enlarged and retroverted. Diagnosis: laceration of cervix, causing subinvolution and retroversion of womb and leucorrhœal discharge.

Treatment.—Repaired cervix May 10, 1903. Patient in bed ten days. After recovery from the operation the discharge diminished and became more watery in character. Then began douching with glycothymoline in 1-20 solution. Patient had next menstrual period June 1, with very little pain, and after this subsided the discharge was very slight. The douching was continued twice daily for another month, when the discharge had vanished entirely and the menstrual period came without pain.

This case furnished a good example of the persistent discharge which may be produced from a laceration of the cervix. It is absolutely useless to attempt to relieve this character of discharge without first repairing the cause. In conclusion, would state that in occasional chronic cases, I have used glycothymoline pure, in an atomiser with satisfactory results.

CHRONIC RHEUMATISM IN CACHEXIA.

R	Potass. iodid.....	½ oz.
	Ol. morrhue.....	3 ozs.
	Tongaline.....	3 ozs.

M. Sig. A teaspoonful every four hours.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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No. 5.

Recent Advances in Neuro-psychiatry.

TWO very important neuro-psychiatral publications have recently appeared in medical literature, the one emanating from the biological laboratory of the Sheppard and Enoch Pratt Hospital, at Baltimore, the other from the laboratory of the neurological clinic at Halle, Germany, under the directorship of Professor Eduard Hitzig. Both deal with the intricate mechanism of brain function and brain action, the latter, however, dealing with the physiological, the former with the pathological side of the question. The Sheppard-Pratt publication, under the directorship of Dr. Edward N. Brush, is composed of a series of articles by members of the staff, on subjects relating to pathological changes in the brain and the symptoms produced by such lesions, while Professor Hitzig's monograph consists of an elaborate study on the relation of the cortex and subcortical ganglia to vision.

About 34 years ago, Professor Hitzig first gave to the world his marvelous discovery of the motor center in the brain. In connection with Professor Fritsch, by means of galvanic stimulation of the dog's cortex, they confirmed the conclusions of Hughlings Jackson, of London, and established beyond dispute the existence of motor centers in the brain. Following these men came Ferrier, Munk, Schiff, Horsley and Beever, Goltz, Bastian, Bianchi, Sherrington, Grünbaum and others, differing somewhat in minor details, but all aiding to establish the original premise of Hitzig, that certain parts of the cortex are intimately associated with motor phenomena, while the remaining parts have no such direct relation.

Curiously enough in the Sheppard-Pratt report appears an excellent article on the motor cortex by Clarence B. Farrar, a clinical assistant of the hospital, who has reviewed the work done since

1870 from the speculative clinico-pathologic, physiologic, anatomic and embryologic viewpoints, and in his very able résumé finds naught to mar Hitzig's contention of 34 years standing, except that the confines of motor cortex-excitability have gradually become narrowed, so as to include only the middle region of the hemispheres, intermediate between the general and special sensory areas on the one side, and the specific association or psychic center on the other.

Professor Hitzig has grown to be an old man, so old that one can not help but be moved by his pathos and his regret at leaving the field of cerebral localisation. He says in concluding his work, comprising over 400 pages, for the most part empirical, that "my investigations regarding the brain are now at an end. My eyesight has almost entirely disappeared and I am suffering with writer's cramp, so that I cannot continue my devoted work any longer. What an example for the younger generation of investigators, what an inspiration, what a figure to look up to! The passing of Professor Hitzig, however, does not mean the decadence and the slumbering of cerebral investigation. The work so eagerly begun by him is being continued throughout the world, and with much energy and perseverance in the United States.

Dr. Brush's report is but a single example of what other institutions are doing along the line. The pathological laboratories of the state institutions are doing work comparing favorably with that done in European laboratories, and the high character and deep scientific spirit is universally acknowledged.

The report of the Sheppard-Pratt Hospital may well be taken as an example, and a closer examination of its contents will reveal the scope and intent of its author.

The director of the laboratory, Stewart Paton, contributes an able article on studies in the manic depressive insanity. In addition to the suggestions made by the author that more extended observations should be made: (1) regarding the variations of the blood pressure, and (2) regarding the changes in the urine during the period of excitement or depression, he might have added also that the functions of the liver should be especially noted for cholemic influence. Clarence B. Farrar contributes an interesting article on the typhoid psychoses. After narrating four cases and discussing briefly the current teaching concerning the effects of the typhoid process on mental functions, the author finally concludes that there, neither in its clinical or anatomical picture, is the typhoid psychosis distinctive.

The next following brief article by William Rush Dunston, Jr., on some points in the diagnosis of dementia precox, is devoted

mainly to the pointing out of certain symptoms which the author found helpful in differentiating dementia precox from neurasthenia and the recovery psychoses. The most important of these is the slow psychical reaction or psycho-motor retardation, having been found present in every case observed by the author. A case of Huntington's chorea with autopsy is the next paper contributed by Glanville Y. Rusk. The author gives the clinical history of a case of this rare disease, with a minutely described microscopical examination of the brain.

Dr. Clarence B. Farrar's article on the motor cortex has been alluded to. Another carefully examined case is that on acute paresis, by Dr. Stewart Paton and Dr. G. Y. Rusk. The microscopical findings revealed nothing that was essentially characteristic of the disease; the character of the changes in the various organs as well as in the central nervous system suggests a general intoxication. Two handsomely engraved plates accompany this article, showing large and small pyramidal cells from the cerebral cortex, bloodvessels, and neuroglia cells. The concluding article is by Dr. William Rush Dunton, Jr., on a case of dementia precox, with autopsy. The microscopical examination showed the greatest amount of cell changes in the first frontal convolution, with slight increase of neuroglia nuclei, phagocytosis and considerable cell disintegration. Four handsome plates accompany this article.

There must be considerable satisfaction to Dr. Brush for being the sponsor of a report from his institution, so highly scientific and thoroughly mastered as this, which has been so inadequately outlined in this review. He has set a good model for similar work by other institutions.

AT THE recent meeting of the American Public Health Association held at Washington, the committee on vital statistics reported that effective coöperation had been instituted between that association, the Conference of State Boards of Health, the American Medical Association, the United States Census Bureau and the United States Public Health and Marine Hospital Service for the improvement of the vital statistics of this country. Among the objects sought are the extension of adequate methods of registration, the use of uniform and comparable tables and rates in bulletins and reports, and the improvement of the international classification of causes of death. A pamphlet on "Statistical Treatment of Causes of Death" has been issued by the United States Census Bureau, requests for which should be addressed to Mr. W. A. King, chief statistician for vital statistics, Census Bureau. It has special reference to the difficulties encountered

in compiling deaths returned from several causes, and asks for the coöperation of the profession in framing a thoroughly satisfactory method of procedure in such cases.

In the edition of the JOURNAL for July, 1903, we made somewhat extended editorial reference to the Manual of International Classification of Causes of Death, issued by the census office and we are glad to have an opportunity to refer to the subject again in the light of the action of the American Public Health Association. A uniformity of practice upon this important question cannot too soon prevail. Every educated physician should give it earnest thought.

WE PRINT elsewhere in this issue an article from the pen of Dr. D. W. Cathell, of Baltimore, dealing interestingly and in considerable detail with the action of the American Medical Association at New Orleans, last May, in abolishing the code of ethics that so long has hung over the medical profession like a pall, and from which it was so happily delivered through the splendid diplomacy of Dr. Charles A. L. Reed, of Cincinnati. Lest it be forgotten, perhaps it may be well to repeat briefly the facts that led up to the change. When the committee on ethics appointed at Saratoga, presented its report at New Orleans through its chairman, Dr. Harris of New York, there was nothing to indicate that the house would not reenact a code of ethics even more offensive than the one ablated at Saint Paul in 1901. But Dr. Reed obtained the floor immediately and moved a substitute, which gave him the aggressive side of the question in leading a determined opposition to the code and which at the same time put the other side on the defensive. The whole question was then referred to a committee of one from each state, which should include the Saratoga committee and Dr. Reed. The latter found a strong coadjutor in Dr. William H. Welch, of Baltimore, and the enlarged committee had not long been in session before it was discovered that victory was assured for Dr. Reed and his inclining.

We hope Dr. Cathell's article will be read carefully by every friend of the old code. It is a thoughtfully prepared analysis by a man who until recently was an ardent champion of that remarkable instrument which, though well enough in its day, for the past twenty years has represented a bygone age.

THE following paragraphs recently clipped from the *New York Tribune*, show the intelligent side of newspaper medicine:

Once more the cancer parasite has been found, this time by a German, Dr. Schmidt. He has also manufactured a serum for that germ, and hopes to secure remedial effects thereby. Simi-

lar discoveries have been reported so often that there is a decent excuse for receiving the latest story with caution. In matters of this kind it is better to hope too little than too much, so long as corroboration is lacking.

The admirable work done by St. Luke's Hospital is to be extended by the erection of a new pavilion, the gift of Mrs. Margaret J. Plant. The original plans provided for the construction of ten such pavilions, five of which are already in use. This excellent institution has an ideal site on Morningside Heights, and its beneficent operations have been of inestimable usefulness.

An obelisk of unpolished gray granite has been placed over Virchow's grave, in the old Matthäi graveyard, Berlin. It bears on one side a black marble tablet, on which are inscribed "Rudolph Virchow" and the date of his birth and death. A statue of Virchow will also be erected near the place where his scientific work was conducted.

Caution should be exercised in accepting all stories about new remedies for old maladies, but there is an exceptional reason for questioning their efficacy in cases of tuberculosis. It has been learned from post-mortem examinations that an extraordinarily large number of people are affected with that disease without knowing it, and completely recover without having a suspicion. It may be the unassisted ability of thousands to shake off the enemy, rather than the virtues of the alleged specific, which explains the marvelous "consumption cures" so frequently reported nowadays.

PERSONAL.

DR. EDWARD C. MANN, of Buffalo, having finished his term of service as interne at the General Hospital, sailed for Europe early in November. He will remain during the winter in Berlin, and before returning in the early summer, will spend some time at each of the principal medical centers of Europe, further pursuing medical research.

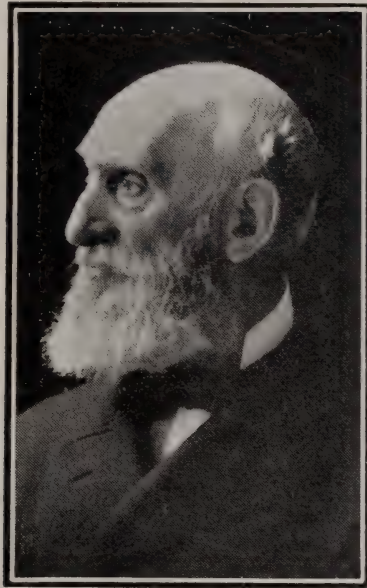
DR. JOHN R. GRAY, of Buffalo, who last spring removed from 246 Seventh Street to his new residence and office at 423 Prospect Avenue, is preparing one of the most extensive floral gardens in the city. He has over two thousand bulbs under cultivation and during the next season expects to make a handsome display of bulbous and other flora.

DR. H. M. EDMONDS, of Tonawanda, has been appointed health officer of that city, vice Dr. R. C. Taber, resigned.

DR. E. L. SHURLY, of Detroit, recently visited Buffalo, and attended the annual dinner of the Alumni of Buffalo General Hospital, which was given at The Touraine, Saturday evening, November 7, 1903. Dr. Shurly's humorous speech was well received by the assembly.

OBITUARY.

DR. CORNELIUS COX WYCKOFF, of Buffalo, died at his residence, 482 Delaware Avenue, Saturday evening, November 7,



CORNELIUS COX WYCKOFF, M. D.

From the ILLUSTRATED BUFFALO EXPRESS,
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1903, aged 81 years. His death was unexpected, though his health had been somewhat impaired of late. Notwithstanding this fact, he continued his professional occupation until the day before his death. He was born at Romulus, N. Y., August 5, 1822, and received his preliminary education at Genesee Wesleyan Seminary, Lima, N. Y., after which he began the study of medicine and entered Geneva Medical College. When the latter school was discontinued, Mr. Wyckoff was among the students who came to Buffalo, and he received his doctorate degree from the Univer-

sity of Buffalo at its second annual commencement, held June 14, 1848. Dr. Wyckoff immediately after graduation began the practice of his profession in this city, and pursued an active medical career until his death, covering a period of fifty-five years. It comes to few men to live so long in one place engaged constantly in professional occupation.

Dr. Wyckoff became a member of the visiting staff of the Buffalo General Hospital when it was organised in 1858, continuing to serve either as attending or consulting physician until the time of his death, and was the last surviving member of the original staff. He joined the Medical Society of the County of Erie in 1849, and served as president in 1864; and he was president of the Buffalo Medical and Surgical Association in 1858. He was president of the board of trustees of the Buffalo Eye and Ear Infirmary, a curator of the University of Buffalo, a member of the Medical Society of the State of New York, of the New York State Medical Association, and of the American Medical Association.

Dr. Wyckoff in his earlier years served as health physician of Buffalo, and during the cholera epidemic of 1852 he performed masterful and courageous service in ministering to the victims of that dread disease. In his later years he served as a member of the park commission, the only office he ever held outside of strictly professional lines. Dr. Wyckoff was twice married; first, in 1849, to Frances Hall Hastings, who died in 1869; and second, to Alice Lindsley Hall who survives. He is also survived by two sons, George S. and Cornelius Hastings Wyckoff.

Dr. Wyckoff was not only an able physician, but he was a man of refinement in taste and cultivation in manners, a charitable, loving, loyal friend and useful citizen. His familiar figure mounted on horseback, as was his daily custom, riding along our streets, will be sadly missed by a large portion of our citizens and, perhaps most of all, by a great number of devoted patients. Appropriate action on his death was taken by the Medical Society of the County of Erie, reported elsewhere, and by the Erie County Medical Association.

DR. JAMES MCFADDEN GASTON, of Atlanta, died at his home in that city, November 15, 1903, aged 79 years. He graduated from the Medical College of the State of South Carolina in 1846, and became a medical officer of prominence in the Confederate Army during the Civil War. From 1865 to 1883 he resided in Brazil, where he practised among the southerners, who colonised in that country. After his return to the United States he became the head of the department of surgery in the Southern Medical Col-

lege at Atlanta, holding the place until declining years compelled him to curtail his professional activity. Dr. Gaston was not only a skilful surgeon, but a man of literary accomplishment, and his writings have been quoted widely at home and abroad. He was president of the Southern Surgical and Gynecological Association in 1892, and of the American Academy of Medicine in 1895. He was elected an honorary fellow of the American Association of Obstetricians and Gynecologists in 1896.

DR. GEORGE JULIUS ENGELMANN, of Boston, died at Nashua, N. H., from pneumonia, November 16, 1903, aged 56 years. He graduated in arts at Washington University in 1867, and afterward pursued his medical studies in Europe, taking his doctorate degree from the University of Berlin in 1871, and that of Master of Obstetrics at Vienna in 1873. He practised and taught in Saint Louis, from 1873 to 1897, and then removed to Boston, where he has since resided. He was known as a gynecologist, and was very much interested in archeology and ethnology. He was president of the Southern Surgical and Gynecological Association in 1890, and of the American Gynecological Society in 1900.

DR. J. J. BIRMINGHAM, of Buffalo, a graduate of the University of Buffalo in 1881, died at his home, October 7, 1903, aged 50 years.

DR. S. H. WARREN, a graduate of the University of Buffalo, 1880, died in this city, October 29, 1903.

SOCIETY MEETINGS.

THE Medical Society of the County of Chautauqua, will hold its semiannual meeting at Fredonia, December 9, 1903, under the presidency of Dr. W. J. French, Hamlet. Papers are promised by Drs. John Parmenter, Buffalo; A. D. Lake, Gowanda; Ellis H. Storms, Cherry Creek; C. H. Richards and W. H. Vosburg, Dunkirk. The profession of adjoining counties is invited to participate in the proceedings.

THE Medical Society of the State of New York will hold its ninety-eighth annual meeting at Albany, January 26-28, 1904. The president has appointed the following-named business committee: Drs. Henry A. Fairbairn, G. R. Butler, Brooklyn, and Andrew Macfarlane, Albany.

THE American Röntgen Ray Society will hold its fourth annual meeting at the University of Pennsylvania, Philadelphia, December 9 and 10, 1903, under the presidency of Dr. Arthur W. Goodspeed, Philadelphia. Dr. John T. Pitkin, of Buffalo, will read a paper entitled, Dangers of the x -ray operator.

THE Southern Surgical and Gynecological Association will hold its sixteenth annual meeting at the new Piedmont Hotel, Atlanta, Tuesday, Wednesday and Thursday, December 15, 16 and 17, 1903, under the presidency of Dr. J. Wesley Bovée, of Washington. Dr. Willis F. Westmoreland, of Atlanta, is chairman of the committee of arrangements. The preliminary program containing 46 papers has been issued. Reduced rates on all railroads south of the Potomac and Ohio rivers, on the certificate plan, will be granted. Any revisions of the program may be sent at once to Dr. W. D. Haggard, secretary, 302 North Vine street, Nashville, Tenn.

THE Buffalo Academy of Medicine held meetings during the month of November, 1903, as follows:

Section on Surgery.—Wednesday evening, November 4. Program: Inflammatory conditions of the kidney. Also remarks on surgical operations pertaining to the kidney, George E. Fell; Contusions of lung, John Parmenter.

Section on Medicine.—Tuesday evening, November 10. Program: Some clinical observations on typhoid fever, Eugene Wasdin; discussion by DeLancey Rochester.

Section on Pathology.—Tuesday evening, November 17. Program: Protozoa as causes of disease, (yellow fever, spotted fever, smallpox, malaria and dysentery), H. G. Matzinger, of the Gratwick Laboratory; discussion led by William G. Bissell. Exhibition of specimens of pathogenic protozoa, including living trypanosomes.

THE Buffalo Academy of Medicine will observe the following program for the remainder of the academic year (1903-4):

December 1.—Surgery. (a) Subject to be announced, A. E. Diehl; (b) The use of invisible light rays in medicine and surgery, Frederick H. Millener.

December 8.—Medicine. Stated meeting of the Academy. Subject to be announced, Irving P. Lyon.

December 15.—Pathology. Subject and place of meeting to be announced.

December 22.—Obstetrics and Gynecology. Rupture of the Uterus, Ludwig Schroeter.

December 29.—Ophthalmology, etc. Subject to be announced, Adolph H. Urban.

January 5.—Surgery. Subject to be announced, A. W. Bayliss.

January 12.—Medicine. Are we as physicians carriers of contagion? Lucien Howe.

January 19.—Pathology. Stated meeting of the Academy. Subject and place of meeting to be announced.

January 26.—Obstetrics and Gynecology. Subject to be announced, Lawrence G. Hanley.

February 2.—Surgery. Subject to be announced, Lawrence G. Hanley.

February 9.—Medicine. Tetany and its relation to gastric diseases, Allen A. Jones.

February 16.—Pathology. Subject and place of meeting to be announced.

February 23.—Obstetrics and Gynecology. Subject to be announced, C. C. Frederick.

March 1.—Surgery. Subject to be announced, E. J. Meyer.

March 8.—Medicine. Spinal cord tumors, William C. Krauss.

March 15.—Pathology. Subject and place of meeting to be announced.

March 22.—Obstetrics and Gynecology. Stated meeting of the Academy. Drainage after abdominal operations, Herman E. Hayd.

March 29.—Ophthalmology, etc. Symposium on Typhoid Fever.

April 5.—Surgery. Cutaneous tertiary syphilitic lesions, Grover W. Wende.

April 12.—Medicine. (a) Mental diseases of old age, Herman G. Matzinger; (b) Enuresis nocturna and its treatment, Julius Ullman.

April 19.—Pathology. Subject and place of meeting to be announced.

April 26.—Obstetrics and Gynecology. The relation between neurasthenia and diseases of the female generative organs, Herman B. Singer.

May 3.—Surgery. X-ray in diagnosis and treatment; presentation of cases; suggestions for treatment of x-ray burns, Sidney A. Dunham.

May 10.—Medicine. Malignant endocarditis, Henry R. Hopkins.

May 17.—Pathology. Subject and place of meeting to be announced.

May 24.—Obstetrics and Gynecology. Subject to be announced, Stephen Y. Howell.

May 31.—Ophthalmology, etc. Stated meeting of the Academy. Symposium on Tuberculosis.

June 14.—Annual meeting.

NOTE.—The meetings of the pathological section will be held at various laboratories in the city. It is desired that the program shall be practical in character, including exhibition of specimens and apparatus, demonstration of cultures, microscopic specimens and lantern slides. It is impossible to announce in advance the place of meeting and the subject as this will depend upon the material accessible at the time of the meeting. This information will be furnished upon the weekly postal card.

COLLEGE AND HOSPITAL NOTES.

THE D. W. Harrington Lectureship, of the University of Buffalo, founded by Dr. D. W. Harrington of this city, has been established and the medical faculty has chosen Dr. Samuel J. Meltzer, of New York, to deliver these lectures for 1903. The subject selected by Dr. Meltzer is, Edema, a consideration of the physiological and pathological factors concerned in its formation. The lectures will be delivered in the Medical College, November 30 and December 1, 2 and 3, at 5 p. m. The medical profession is cordially invited to attend. These are the first lectures given on this foundation. Lectures will be given as often as the income from the fund will warrant.

THE amalgamation of the medical faculties of Toronto and Trinity Universities has become an accomplished fact, and the opening of the new buildings of the University of Toronto was celebrated in appropriate fashion October 1, 1903. Representatives were present from sister universities in the United States and Canada, and a dedicatory address was delivered by Professor Charles H. Sherrington, M. D., Hall professor of physiology in the University of Liverpool. Other addresses were delivered by Welch, of Johns Hopkins; Bowditch, of Harvard; Chittenden, of Yale; Roddick, of McGill; Abbott, of Pennsylvania; McMurrich, of Michigan; Barker, of Chicago; Osler, of Johns Hopkins, and Park, of Buffalo. The Canadian *Practitioner* for November, devotes its entire space to a detailed account of the proceedings, publishing all the addresses and lectures in full, and giving illustrations of the buildings. It is a creditable exhibition of journalistic enterprise.

THE Memorial Hospital, Richmond, Va., was opened for patients August 1, 1903. The building is a stately modern structure, built on classic lines and is one of the most complete hospitals in the south. A beautiful brochure has just been issued by the hospital authorities, which is a model of exquisite taste, descriptive of the hospital and its purposes, illustrated with numerous engravings, showing the exterior and interior of the building. Dr. George Ben Johnston supervised the plans and the construction of the building, and deserves great credit for the admirable result.

THE Western Surgical and Gynecological Association will hold its thirteenth annual meeting at Denver, Colo., December 28 and 29, 1903, under the presidency of Alexander Hugh Ferguson, Chicago. The preliminary program has been issued, additions to which may be made until December 10, by addressing the secretary, Dr. George H. Simmons, 103 Dearborn avenue, Chicago.

THE New York State Association of Railway Surgeons held its thirteenth annual meeting at the New York Academy of Medicine, November 12, 1903, under the presidency of Dr. Henry Flood, of Elmira. Drs. G. R. Trowbridge, F. J. Carr and A. J. Gumaer, of Buffalo, attended the meeting and invited the association to come to this city next year, but New York has been selected as the permanent meeting place. Dr. Trowbridge read a paper entitled, Conservatism in railway surgery. A change of name was made to the New York and New England Association of Railway Surgeons.

BOOK REVIEWS.

- I. THE PRACTICAL MEDICINE SERIES OF YEARBOOKS, comprising ten volumes in the year's progress in medicine and surgery. Issued monthly. Under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. VI. General Medicine. Edited by Frank Billings, M. S., M. D., head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago. And J. H. Salisbury, M. D., Professor of Medicine, Chicago Clinical School. Duodecimo, pp. 316. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$7.50.)
- II. Volume VII. Pediatrics. Edited by Isaac A. Abt, M. D., Assistant Professor of Medicine, Rush Medical College. Orthopedic Surgery. Edited by John Ridlon, M. D., Professor of Orthopedic Surgery, Northwestern University Medical School. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

I. This book gives a most satisfactory résumé of the advances in general medicine during the past year (1902), and presents it

in a form both attractive and available for the busy physician. Diseases of the gastrointestinal tract necessarily take up considerable space, which is well appropriated. Reference is made to Deaver's exhaustive article on pancreatic disease, published in the *Am. Jour. Med. Sci.*, February, 1903; also to Opie's work in this field.

II. The portion of Volume VII., devoted to the consideration of pediatrics is full of interest for every physician who is responsible in any manner for the care of infants. It contains a reference to J. W. Ballantyne's article in the *British Medical Journal* on the premature infant, and to Irving M. Snow's case of tetany complicating diphtheria, published in the *Am. Jour. Med. Sciences*, December, 1902. It is replete with valuable material, relating to diseases of the digestive organs and of nutrition,—two of the most important topics pertaining to infantile disease.

In the section on orthopedic surgery Ridlon gives the Lorenz method of dealing with congenital dislocation of the hip, and with club foot, and makes detailed reference to the visit of Professor Lorenz to this country in 1902, and to the work he performed. Much of the other material will be found of timely interest to all who practise orthopedic surgery.

These two volumes are excellent examples of what can be done by men trained in the art of condensing valuable medical material and serving it up in its best form.

A TEXTBOOK OF THE DISEASES OF WOMEN. By THOMAS A. ASHBY, M. D., Professor of Diseases of Women in the University of Maryland. Octavo, 661 pages, with 233 illustrations. Baltimore: Williams & Wilkins Co. 1903.

Notwithstanding the pronunciamento of Howard Kelly that gynecology is becoming, or will become, a lost art, all of its value having been absorbed by the general, all around, sure enough surgeons, more new textbooks and treatises on diseases of women have issued from the press this season than in many previous autumns. Publishers do not print books for their own amusement, and if they turn them out at all it is because they are wanted. After squeezing a lemon and using all its delicious succulence, it is not a generous act to girdle the tree that bore the fruit, and we predict that the attempt to strangle gynecology by those who have profited most in its practice will react upon them to their dismay. We are prompted to preface our comments on Professor Ashby's excellent book with the foregoing remarks, to point out the wisdom of the homely, but sensible, proverb "always speak well of a bridge that carries you safely over the stream."

The time has passed, at least nearly so, when a critical review of a work is needed. What is most required is a statement as to the practical value of a book based upon its careful examination by a competent observer. This one begins with a historical sketch of gynecology, of which we quite approve. There is too much

neglect of the history and traditions of medicine nowadays, and we hope to see this corrected through the efforts of such competent men as Dr. Ashby. Every textbook, every teacher, no matter as to the topic, should impart to the student some information, even though it be meager, of the history of the subject written upon or taught.

The author of this work gives due prominence to physical diagnosis, to which end he describes in detail the modern methods of examination. The various postures are portrayed by words and illustration, and necessary instructions are given for a thorough exploration of the pelvis and its contents. The chapter on gynecological technic, embracing surgical asepsis, antisepsis, and sterilisation, is a well digested presentation of a most important topic. All the various diseases of the female genital tract, from vulva to ovary, are set forth in concise, practical, yet sufficiently complete form, and are made clear to the student, which is tantamount to saying that everybody who reads may learn what the author is teaching.

Operative gynecology, including plastic surgery of the perineum and cervix and of fistulæ, neoplasms of the uterus, diseases of the tubes and ovaries, together with affections of the urethra, bladder and ureters, are all adequately presented and the word-pictures are in many instances most charming. There is room, however, in this part of the work, especially where it deals with diseases of the ovary and of the urinary tract, for more complete art illustration. Ashby's description and treatment of cystitis, acute and chronic, will prove of special aid and value to the young practitioner, who usually finds these conditions troublesome to manage, and will welcome such clear and concise directions as he will find in this book.

The size and make-up of this work is attractive, it being convenient to handle and easy of reference. We doubt not, it will receive favor at the hands of students and junior physicians, as well as trained gynecologists.

A TEXTBOOK OF CHEMISTRY FOR STUDENTS OF MEDICINE, PHARMACY AND DENTISTRY. By EDWARD CURTIS HILL, M. S., M. D., Professor of Chemistry and Metallurgy in the Colorado College of Dental Surgery; Professor of Chemistry and Toxicology in Denver and Gross College of Medicine, University of Denver. Octavo, pp. 535. With 78 illustrations, including 9 full-page half-tone colored plates. Philadelphia: F. A. Davis Company. 1903. (Cloth, \$3.00.)

Upon looking over the table of contents one is struck by the wide range of information which the author attempts to cover in the space of 510 pages. A careful reading of this book shows, however, that condensation has been carried to the extreme, and that in many instances the subjects have been merely mentioned, while in others the knowledge imparted is very meager.

The first section treats of medical physics, and to our mind is the freest from errors of any in the book. To be in strict accord

with the terminology used in the balance of the work the term "medic" should have been used in place of "medical."

The too early use of symbols and formulæ, almost before the student has become acquainted with their meaning or significance, tends to confuse the student and render the subject more difficult. If less attention had been given to an effort to cover a wide field, and more to clearness and accuracy of statement, much might have been accomplished.

On page 93 the author gives the melting point of silver as 1040° , and on page 96 as 954° . Speaking of alum, on page 164, the author says: "Soda alum is much used as the acid element in cheap baking powders. This practice is reprehensible, since part of the salt changes in the stomach to phosphate and hydrate of al., both of which are soluble in the gastric juice, and the like." From the statement as made the student is left to conjecture as to the source of the phosphoric acid which would produce this phosphate.

On page 182 is said: "IDENTIFICATION OF CYANATES.—On moistening they yield the corresponding bicarbonate." Comment is unnecessary upon a statement so much at variance with facts. On page 193 the writer says that benzin, benzolin, or petroleum, ether remains semiliquid at 175° , while 12 lines above this statement, the boiling point of benzin is given as 50° - 60° . Page 204, "aristol is an odorless substitute for $C H_3$." Comment again is unnecessary.

Speaking of hydrocyanic acid, on page 354, the author says: "Chlorin-water and calcium chlorid are mentioned as antidotes." We know of no author who mentions calcium chlorid as an antidote for prussic acid poisoning. Chloride of lime or calcium hypochlorite is mentioned and has been used with good results. Under the heading of "Poisonous Bites and Stings," the writer again makes the same error.

References to careless and inaccurate statements might be multiplied, but we believe a sufficient number have been given to indicate the general character of the work before us.

On the whole, we do not feel justified in recommending this work for general use. From the publishers' standpoint the book is well printed and the plates are good.

J. A. M.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.
Ninety-seventh Annual Meeting, held at Albany, N. Y., January 27, 28
and 29, 1903. Frederic C. Curtis, M. D., Secretary. Brandon Printing
Co., Albany. 1903.

This volume is an interesting record of the proceedings of this society at its ninety-seventh annual meeting. Few societies can show a continuous existence for nearly a century, and none has published so complete an account of its work during all this time. The advantages of an annual volume of society transactions are so superior to the journal method, it is surprising that it is not

adhered to, at least by the older societies. Journals become lost, mislaid, or otherwise disposed of, and thus the record is broken; whereas, a book properly bound is always accessible, and is an ornament to the library. It is the cheaper method, too; hence it does not necessitate large fees. The journal method will bankrupt any society in the end, unless it has a large constituency paying in turn large dues to support it. There are too many journals in existence already, and state societies should not enter the field of competition, because it places them too distinctly in the commercial field and serves to lower their *esprit de corps*. In the present volume the president's address entitled, Progress, liberty, unity, is a state paper of more than ordinary importance, and one that reflects the highest honor upon its distinguished and scholarly author, Dr. Henry Reed Hopkins, of Buffalo. The address by Professor Charles A. L. Reed, of Cincinnati, entitled, Rudolf Virchow; an appreciation, is a world-famous paper that has attracted attention wherever the name and fame of Virchow are known.

The scientific contributions are above the average of professional papers. The discussions are rather meager,—a defect that is easily remedied. Fewer papers would mean a less crowded program, and more opportunity for discussion. The society should remain in session three full days, which would tend to relieve the pressure on the program. We miss the list of delegates and permanent members in attendance, an omission that should be remedied, because it is important to know who were present at each meeting. The editorial work of the book reflects the highest credit upon the secretary.

AMERICAN TEXTBOOK OF SURGERY. For Practitioners and Students. Edited by William W. Keen, M. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; and J. William White, M. D., Professor of Surgery, University of Pennsylvania, Philadelphia. Fourth edition, thoroughly revised and greatly enlarged. Octavo, 1363 pages, with 551 text-illustrations and 39 full-page plates, many in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$7.00 net; sheep or half morocco, \$8.00 net.)

The reissue of this standard work will afford an opportunity for the medical profession to obtain one of the most thoroughly useful works on surgery that has been published in this country. The remarkable sale of the previous editions has been a subject of comment, and must have been gratifying to editors, contributors, and publishers.

This fourth edition has been carefully revised to keep it abreast of the work of American surgeons. The editors gracefully state that since the last edition was issued Abbe, Crile, Coley, Cushing, (of Baltimore), Da Costa, Edebohls, Finney, Fowler, Frank, Frazier, Halsted, Mayo, Matas, Monks, Stewart, Wyeth, Wier and many others have made important contributions to surgery in

this country, while many European surgeons have done the same, and that all the contributions have been utilised in this book. This surgical activity has possibly been stimulated in a considerable degree by this work,—a modest claim the authors, in our view, are justified in making.

Among the many improvements in this edition are six new chapters, the subjects of which are military surgery, naval surgery, tropical surgery, examination of the blood, immunity and the pancreas. The latter receives more extended notice in order to cover the surgery of that organ, which has taken its place in surgical literature since the publication of the last edition. The work presents the same general appearance as formerly, and will maintain its place in literature as the chief exponent of American surgery.

THE PRINCIPLES OF OBSTETRICS. A Practical Manual for the Student and General Practitioner. By STANLEY PERKINS WARREN, M. D., Portland, Me., Obstetric Surgeon to the Maine General Hospital. Octavo; 385 pages. Illustrated by 165 lines and half-tone engravings. William Wood & Company, New York. 1903. (Cloth, \$3.00; leather, \$3.75 net.)

There is no drought in obstetric literature this season and, it must be confessed, much of it is of the very best. This book, for example, though not as pretentious as some others is, nevertheless, one of the best of its class. It does not claim place among the exhaustive treatises, nor does it belong with the smaller manuals, but it occupies an intermediate position, being a book that contains the essentials of obstetrics without being voluminous on the one hand, nor elementary on the other. Moreover, its price places it in a class practically by itself, and meets the conditions often confronted in which a limited purse must obtain much for its outlay.

The author has exhibited discretion in selecting his material and in arranging it for the practical obstetrician. It is a book that can be consulted quickly in an emergency, and in which will be found just what is required,—namely, guidance in a dilemma when aid is most needed. Considerable attention is given to obstetrical asepsis in private practice, which is a topic of great importance. The book is adequately illustrated with well executed drawings and engravings, and is a commendable addition to the literature of obstetrics.

STUDIES IN THE PSYCHOLOGY OF SEX. SEXUAL IMPULSE IN WOMEN. Third Volume in Series. By HAVELOCK ELLIS, L. S. A. (England), General Editor of the Contemporary Science series since 1899. Sold only to physicians, lawyers, clergymen, advanced teachers, and scientists. Philadelphia. F. A. Davis Company. 1903. (Cloth, \$2.00 net, delivered.)

The subject dealt with in this book is one of great delicacy and deserves the most patient study. In its presentation, too,

there should be equal delicacy of expression, with an elimination of everything that should excite prurience or create disgust. Some portions of this book are constructed on scientific lines and will serve to throw light on a darkened field,—one at all events too little understood and, perhaps, greatly misunderstood.

Some other parts of the book might have been omitted without, it seems to us, detracting from its usefulness or scientific value. We refer to some of the "histories" that are given with such graphic exactitude of detail, as to reach pretty near the borderline of decency. The attempt to limit the sale of this series of "studies" is wise, though it is doubtful if it succeeds. The announcement of the fact that only physicians, lawyers, clergymen, advanced teachers, and scientists may become purchasers is quite sufficient to sharpen the appetite of the curious who, no doubt, will buy surreptitiously in large numbers.

A **THESAURUS OF MEDICAL WORDS AND PHRASES.** By WILFRED M. BARTON, M. D., Assistant to Professor of Materia Medica and Therapeutics, and Lecturer on Pharmacy, Georgetown University, Washington, D. C.; and Walter A. Wells, M. D., Demonstrator of Laryngology and Rhinology, Georgetown University, Washington, D. C. Octavo, 534 pages. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, \$2.50 net; with thumb index, \$3.00 net.)

This is a medical wordbook constructed on new lines as concerns the field of medicine, though similar works cover general literature, for example Roget's, which is so useful. The medical writer or speaker will find this "thesaurus" a great aid in increasing his vocabulary or simplifying his expressions. It is most important for a speaker or writer to convey to his audience the exact thought of his brain in words so plain that he may not be misunderstood. Very often the real point of an argument or theme is missed through failure to choose the appropriate phrase. This book will serve to correct such faulty diction, if referred to frequently and with care, whenever there is doubt. It is superbly printed and handsomely bound in flexible red leather.

THE **LATIN GRAMMAR OF PHARMACY AND MEDICINE.** By D. H. ROBINSON, Ph. D., late Dean of School of Arts, and Professor of Latin Language and Literature, University of Kansas. With an introduction by L. E. Sayre, Ph. M., Professor of Pharmacy in, and Dean of, Department of Pharmacy, University of Kansas. Fourth edition. Thoroughly revised by Hannah Oliver, A. M. Philadelphia: P. Blakiston's Son & Company. 1903. (Price, \$1.50.)

In order to acquire sufficient knowledge of Latin to read or write it correctly, it is necessary to take up its study deliberately and pursue it systematically under a competent tutor. There is no royal road to learning; it must be obtained through patient and enduring effort. The book before us evidently has been prepared by a student of language and a scholar of no mean attainments,

and as a textbook for the beginner of medical Latin, it is unique and superb. As a work of reference for older persons who may have become "rusty" in the classics it also is of great value. Therefore, it is a book that may find an appropriate place in the outfit of both student and physician.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IX. Physiology, Pathology, Bacteriology, Anatomy, Dictionary. Edited by W. A. Evans, M. D., Adolph Gelrmann, M. D., William Healy, M. D. Duodecimo, pp. 233. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

This might well be termed a conglomerate number of this useful series. It deals with a number of different topics, yet all are more or less related. In it will be found the recent advances pertaining to physiology, pathology, bacteriology, and anatomy, while to it is added a dictionary of new medical terms. This latter point is an excellent idea, novel in plan, and practical in execution. New terms are constantly appearing in print that are not found in the standard dictionaries, hence this method of reinforcing the wordbook outfit is commendable. It is in keeping with the progressive spirit of the editors.

A MANUAL OF OBSTETRICS. By A. F. A. KING, M. D., Professor of Obstetrics and Diseases of Women, in the Medical Department of the Columbian University, Washington, D. C., and in the Medical Department of the University of Vermont. Ninth edition, revised and enlarged. In one 12mo volume of 628 pages, with 275 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$2.50 net.)

This manual is a familiar friend, having appeared at intervals for more than 20 years. It is a rare circumstance for a work on obstetrics to pass to its ninth edition during the active lifetime of its author, yet such has been the case with this manual, and Professor King himself has prepared each edition for the press. He has kept his excellent book abreast of the progressive present, and its popularity is unabated. Indeed, it is one of the best, as it is one of the oldest obstetric manuals, and is not only a superb guide for the student, but it is a valuable reference book for the obstetrician.

RADIUM AND OTHER RADIOACTIVE SUBSTANCES. With a Consideration of the Treatment of Disease by the Ultraviolet Light. By WILLIAM J. HAMMER, Consulting Electrical Engineer. Duodecimo, pp. 72. Illustrated. New York: D. Van Nostrand Co. 1903. (Price, \$1.00.)

This monograph, being in reality a lecture delivered by the author before a joint meeting of the American Institute of Electrical Engineers and the American Electrochemical Society, at New York, April 17, 1903, is full of interest for all who are engaged in the study of radium and other radioactive substances.

It also presents a consideration of phosphorescent and fluorescent substances, together with the properties of selenium, and closes with a short section on the treatment of disease by the ultraviolet light. Mr. Hammer has condensed into small space much valuable material.

CONSUMPTION A CURABLE AND PREVENTABLE DISEASE. What a layman should know about it. By LAWRENCE F. FLICK, M. D., Founder of the Pennsylvania Society for the Prevention of Tuberculosis. Duodecimo, 295 pages. Philadelphia: David McKay, Publisher. 1903. (Price, \$1.00.)

This author has written an admirable little book for the layman, which every doctor will find helpful to him in instructing consumptives themselves and their families, in order to secure their intelligent coöperation in battling with this destructive infection. The nature of consumption, the prevalency and ravages of the disease, what predisposes to consumption, the manner in which consumption is spread, human and animal tuberculosis, the curability of the disease, the various factors entering into the treatment, and the questions of marriage and the care of offspring, are all considered.

The book is plainly written so that it will be understood by all; the views it sets forth are rational, hopeful and scientific, and for the good of suffering humanity it should have a wide circulation. M. J. F.

PROGRESSIVE MEDICINE. Fifth Annual Series. Volume III. September, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 398 pages; illustrated. Philadelphia and New York: Lea Brothers & Co. (Per volume, \$2.50, by express prepaid. Per annum, in four cloth-bound volumes, \$10.00.)

The prosperity of this digest of progress in medical science is dependent upon its excellence, it being the only quarterly of its kind, and it fills the place for which it was designed. In this volume may be found diseases of the thorax and its viscera, including the heart, lungs, and bloodvessels, by William Ewart; dermatology and syphilis, by William S. Gottheil; diseases of the nervous system, by William G. Spiller; and obstetrics, by Richard C. Norris. It is doubtful if so much valuable material has ever before been put into such compact form, and sold at such a low price.

THE MEDICAL NEWS VISITING LIST FOR 1904. Lea Brothers & Company, Philadelphia, 706 Sanson Street; New York, 111 Fifth Avenue.

This is the eighteenth annual issue of one of the most useful articles in a physician's equipment. To do without a visiting list would be next to impossible in these hurrying days. The loss in

income from unrecorded visits and other omitted memoranda, did one not have such a book in the pocket, would be surprising if accurately computed. This list has been revised and contains all that is needed for business purposes, besides much important clinical material for quick reference. It is issued in four styles in order to meet the various requirements of physicians. The weekly, monthly and 30 patient perpetual, contain 32 pages of data and 160 pages of classified blanks. The 60-patient perpetual consists of 256 pages of blanks alone. Each constitutes one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years, \$1.25. Thumb-letter index, 25 cents extra. By mail, postpaid to any address.

A LABORATORY GUIDE IN URINALYSIS AND TOXICOLOGY. By R. A. WITTHAUS, M. D., Professor of Chemistry, Physics and Toxicology in the Medical Department, Cornell University, New York. Fifth edition. New York: William Wood & Co. 1903. (Price, \$1.00.)

Laboratory work is an essential part of a student's preparation for his life occupation, and it should be done with serious application, under a competent instructor. Not only this, but laboratory guides are an essential part of the equipment. This one is on a practical subject prepared by a practical teacher, has stood the test of time, and will be found of vast usefulness, not only to the student, but to the practitioner. It is so important to be prepared to make an elaborate analysis of urine for clinical purposes, that no argument is needed to prove the fact; in other words, this book speaks for itself.

LEA'S SERIES OF MEDICAL EPITOMES. MEDICAL JURISPRUDENCE. A manual for Students and Practitioners. By E. W. DWIGHT, M. D., Instructor in Legal Medicine, Harvard University. In one 12mo volume of 249 pages. Series edited by V. C. Pedersen, A. M., M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Philadelphia and New York: Lea Brothers & Co. 1903. (Cloth, \$1.00, net.)

The author of this compend, or epitome as it is called, has accomplished a difficult task in presenting the essentials of medical jurisprudence in a small compass, and yet preserving the important features for use in the class room. Only such an experienced teacher as Dr. Dwight could be expected to attain such results. The book deals with a subject that is too often neglected, and this form of presentation ought to do much toward stimulating a familiarity with it.

MEDICAL DIRECTORY OF NEW YORK, NEW JERSEY AND CONNECTICUT. Published by the New York State Medical Association. Volume V. 1903.

This volume appears promptly and maintains the high standard established in the publication of this directory, as well as the same general plan of the preceding volumes. Tinted paper in some of

its sections has been found so practical that it is continued. An addition has been made by publishing a list of medical libraries, which may prove useful. The total number of names in the book is 14,524, of which 11,350 belong to New York; 1,991 to New Jersey, and 1,183 to Connecticut. Of those in the first group 5,589 reside in Greater New York, and 5,761 in the state at large outside the greater city.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VIII. *Materia Medica and Therapeutics; Preventive Medicine; Climatology; Suggestive Therapeutics; Forensic Medicine.* Edited by Drs. George F. Butler, Henry B. Favill, Norman Bridge, Daniel R. Brower, and Harold N. Moyer. Duodecimo, 326 pages. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$7.50.)

The topics considered in this volume are such as to appeal to the general practitioner of medicine, and they are prepared by authors of experience in the several fields that are therein cultivated. There is nothing new to be said regarding the publication of this series of yearbook literature. It has established itself as a useful aid to the busy doctor, and it is maintaining a standard of excellence that will continue to attract professional interest.

LEA'S MEDICAL EPILOGUE SERIES. *Microscopy and Bacteriology. A Manual for Students and Practitioners.* By P. E. ARCHINARD, A. M., M. D., Demonstrator of Microscopy and Bacteriology, Tulane University of Louisiana, Medical Department. Duodecimo, pp. 210. Illustrated with 74 engravings. Series edited by V. C. Pedersen, A. M., M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903.

This contribution to the epitome series aims to afford to the student a clear and concise statement of the essentials of bacteriology and microscopy. Naturally, in a work of this character originality is neither expected nor desired. The book, however, meets all the requirements of a compend. Questions for quizzing are placed at the end of each chapter. It is an excellent little handbook for the beginner in bacteriological studies. M. J. F.

BLAKISTON'S QUIZ COMPENDS. *A Compend of Human Anatomy.* By SAMUEL O. L. POTTER, M. D., Author of the *Handbook of Materia Medica, Pharmacy and Therapeutics*. Seventh edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. (Price, 80 cents.)

The study of anatomy involves patient effort and draws heavily upon the memory. Any well-matured scheme that will aid the student in memorising the essentials of the topic is to be commended. Anatomy is especially adapted to presentation in the compend form, and we heartily recommend this one to students who are pursuing anatomical studies.

PLAIN HINTS FOR BUSY MOTHERS. By MARIANNA WHEELER, Superintendent of the Babies' Hospital, New York, and author of *The Baby*. E. B. Treat & Co., New York. 1903. (Price, 35 cents.)

The object of this monograph is to instruct and advise the mother of limited means, living in a large city, in the matters of bathing, clothing, and feeding the young infant, in ventilation, out-door life, and the treatment of simple ailments. It is written in a succinct style and covers the essential points aimed at. If it could reach the mothers for whom it is intended, it would do much good. District nurses and settlement workers will find it a good book to introduce to their patients and neighbors.

M. J. F.

NURSES' GUIDE TO SURGICAL BANDAGING AND DRESSING. By WILLIAM JOHNSON SMITH, F. R. C. S., Principal Medical Officer, Seamen's Hospital, Greenwich. Philadelphia: J. B. Lippincott Co. 1903. (Price, 75 cents.)

This is a book written for the instruction of pupil nurses, particularly those in surgical wards. We commend it to hospital superintendents and others interested in the training of nurses. It is well adapted for the purpose named and also is a valuable addition to the literature for the advanced nurse.

M. J. F.

THE PHYSICIANS' POCKET ACCOUNT BOOK. By J. J. TAYLOR, M. D. The Medical Council, Philadelphia. (Price, \$1.00.)

This is a new edition, reduced in size, of the pocket account book published by Dr. Taylor for two years past. For some reasons the size of this edition may prove an advantage, chiefly because it can be carried in the pocket with greater convenience. This system of bookkeeping is a good one and it could be adopted by most physicians with advantage.

BOOKS RECEIVED.

The American Illustrated Medical Dictionary. For Practitioners and Students. A Complete Dictionary of the Terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, and the kindred branches, including much collateral information of an encyclopedic character, together with new and elaborate tables of Arteries, Muscles, Nerves, Veins, and the like; of Bacilli, Bacteria, Micrococci, Streptococci; Eponymic Tables of Diseases, Operations, Signs and Symptoms, Stains, Tests, Methods of Treatment, etc., etc. By W. A. Newman Dorland, A.M., M.D., editor of the "American Pocket Medical Dictionary." Handsome large octavo, nearly 800 pages, bound in full flexible leather. Philadelphia, New York. London: W. B. Saunders & Company. 1903. (Price, \$4.50 net; with thumb index, \$5.00 net.)

A Textbook of Clinical Anatomy. For Students and Practitioners. By Daniel N. Eisendrath, A.B., M.D., Clinical Professor of Anatomy in the Medical Department of the University of Illinois (College of Physicians and Surgeons); Attending Surgeon to the Cook County Hospital, Chicago. Handsome octavo of 515 pages, with 153 illustrations, a number

in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

A Textbook upon the Pathogenic Bacteria. For Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Philadelphia Hospital and to the Medico-Chirurgical Hospital, Philadelphia. Handsome octavo volume of 629 pages, fully illustrated, a number in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$3.50 net.)

A Textbook of Diseases of Women. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania; Gynecologist to the Howard, the Orthopedic, and the Philadelphia Hospitals. Handsome octavo volume of 675 pages, with 650 mostly original illustrations, many in colors. Philadelphia, New York, London: W. B. Saunders & Co. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

General Pathology, or the Science of the Causes, Nature and Course of the Processes of Disease. By Dr. Ernest Ziegler, Professor of Pathological Anatomy and of General Pathology in the University of Freiburg in Breisgau. Translated from the tenth revised German edition, and edited by Alfred Scott Warthin, M.D., Professor of Pathology and Director of the Pathological Laboratory in the University of Michigan, Ann Arbor, Mich. Octavo, pp. 783. Illustrated. New York: William Wood & Co. 1903. (Cloth, \$5.00.)

A Textbook on the Practice of Medicine. Designed for the Use of Students. By James Magoffin French, M.D., Lecturer on the Theory and Practice of Medicine, Medical College of Ohio; Attending Physician, St. Mary's Hospital, Cincinnati. Octavo, pp. 799. Illustrated by ten full-page plates and fifty wood engravings. New York: William Wood & Company. 1903. (Cloth, \$4.00.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otolaryngology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia. Volume III. Thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. 1903. [Cloth, \$2.00.]

Electro-Static Modes of Application, Therapeutics and the Uses of the Röntgen Ray. By William Benham Snow, M.D., Professor of Electro-Therapeutics and Radiotherapy in the New York School of Physical Therapeutics. Second edition revised and enlarged. Over one hundred illustrations, including ten full page half-tones. A. L. Chatterton & Co. New York. 1903. (Price, \$3.00.)

Transactions of the Medical Association of the State of Alabama. Annual meeting held at Talladega, Ala., April 21-24, 1903. G. P. Waller, M.D., Secretary.

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States for the fiscal year 1900. Two volumes. Washington: Government Printing Company. 1903.

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Lea's Medical Epitome Series. Physics and Inorganic Chemistry. A Manual for Students and Practitioners. By A. McGlennan, M.D., Associate Professor of Physiological Chemistry, College of Physicians and Surgeons, Baltimore, Md. Duodecimo, pp. 216. Illustrated with 20 engravings. Series edited by V. C. Pedersen, A.M., M.D., Instructor in Sur-

gery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, \$1.00.)

The Four Epochs of Woman's Life. Maidenhood, Marriage, Maternity, Menopause. By Anna M. Galbraith, M. D., Author of Hygiene and Physical Culture for Women. With an introductory note by John H. Musser, M.D., Professor of Clinical Medicine, University of Pennsylvania. Duodecimo volume of 247 pages. Second edition, revised and greatly enlarged. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$1.50 net.)

The Johns Hopkins Hospital Reports. Volume XI. Nos. 1-9. Baltimore: The Johns Hopkins Press. 1903.

Medical Reports of the Sheppard and Enoch Pratt Hospital. Volume I. No. 1. Baltimore: The Friedenwald Co. 1903.

A Manual of Bacteriology. By Herbert U. Williams, M. D., Professor of Pathology and Bacteriology, Medical Department, University of Buffalo. Duodecimo, pp. 351. With 99 illustrations. Third edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$1.75.)

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfurt a. M. Authorised American edition, translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part IV. The Acid Autointoxications. By Prof. Dr. Carl von Noorden and Dr. Mohr. Duodecimo, pp. 80. New York: E. B. Treat & Co. 1903. (Price, 50 cents.)

Lea's Series of Medical Epitomes. Normal Histology. A Manual for Students and Practitioners. By John R. Wathen, M. D., Professor of Surgery and Gynecology in the Kentucky School of Medicine, Louisville. Series edited by V. C. Pedersen, M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Duodecimo, pp. 229. Illustrated. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, \$1.00.)

Blakiston's Quiz Compends. Compend of Gynecology. By William H. Wells, M. D., Chief of the Gynecological Staff of the Mount Sinai Hospital, Philadelphia. Third edition, revised and enlarged. With 145 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

A Textbook of Practical Gynecology for Practitioners and Students. By D. Tod Gilliam, M. D., Professor of Gynecology in Starling Medical College, Columbus, O.; Gynecologist to St. Anthony and St. Francis Hospitals, Columbus, O. Octavo, pages 650. Illustrated with 350 engravings, a colored frontispiece and full page half-tone plates. Philadelphia: F. A. Davis Company. 1903. (Cloth, \$4.00 net; half-Russia, \$5.00 net, delivered.)

Lea's Series of Medical Epitomes. Anatomy. A Manual for Students and Physicians. By Henry E. Hale, A. M., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons (Columbia University) New York. Duodecimo, 384 pages, with 71 illustrations. Series edited by V. C. Pedersen, M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$1.00 net.)

Infectious Diseases. Their Etiology, Diagnosis and Treatment by G. H. Roger, Professor Extraordinary in the Faculty of Medicine of Paris, etc., translated by M. S. Gabriel, M. D., New York. In one octavo volume, of 864 pages, with 43 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$5.75 net.)

Transactions of the twenty-fifth annual meeting of the American Laryngological Association, held at Washington, D. C., May 12-14, 1903. James E. Newcomb, M.D., Secretary. New York: Rooney-Otten Co.

The Treatment of Certain Malignant Growths by Excision of the External Carotids. By Robert H. M. Dawbarn, M. D., Professor of Surgery and Surgical Anatomy in the New York Polyclinic Medical School and Hospital; Visiting Surgeon to the City Hospital, New York. (The Samuel D. Gross Prize Essay). Octavo, pages 105. Philadelphia: F. A. Davis Co. 1903. (Price, \$2.00 net.)

A Treatise on Orthopedic Surgery. By Royal Whitman, M. D., Instructor in Orthopedic Surgery in the College of Physicians and Surgeons (Columbia University), New York. Second edition, revised and enlarged. Octavo, 820 pages, with 507 engravings, mostly original. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$5.50 net.)

Clinical Pathology of the Blood. A Treatise on the General Principles and Applications of Hematology. By James Ewing, M. D., Professor of Pathology, Cornell University Medical College, New York. Second edition, revised and enlarged. Octavo, 492 pages, with 43 engravings and 18 full page colored plates. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$3.50, net.)

A Manual of Hygiene and Sanitation. By Seneca Egbert, M. D., Professor of Hygiene in the Medico-Chirurgical College of Philadelphia. Third edition, enlarged and thoroughly revised. Duodecimo, 467 pages, with 86 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$2.25 net.)

Atlas of the External Diseases of the Eye. By Prof. Dr. O. Haab, of Zurich. Second edition, thoroughly revised. Edited, with additions, by G. E. de Schweinitz, A. M., M. D., Professor of Ophthalmology in the University of Pennsylvania. With 98 colored lithographic illustrations on 48 plates, and 232 pages of text. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Price, \$3.00 net.)

The American Pocket Medical Dictionary. Edited by W. A. Newman Dorland, M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania. Containing the pronunciation and definition of the principal words used in medicine and kindred sciences, with 566 pages and 64 extensive tables. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, with gold edges, \$1.00 net; with thumb index, \$1.25 net.)

Report of the Commissioner of Education for the year 1902. Volume I. Washington: Government Printing Office. 1903.

LITERARY NOTES.

THE *Daily Medical Journal* announces that, owing to delay in securing European correspondents, its publication is postponed to January 1, 1904.

THE *Journal of Tuberculosis*, heretofore a quarterly, will be published as a monthly, beginning January 15, 1904. Some improvements in the magazine will be made, but the subscription price will remain the same—\$3.00.

THE ENNO SANDER PRIZE.—The essayist securing first place will receive a gold medal of the value of \$100.00. The essayist securing second place will receive a life membership in the Association of Military Surgeons of the United States of the value of \$50.00. Subject of the competition for 1904 is, The relation of the medical department to the health of armies.

Among the conditions of the competition are that it is open to all persons eligible to active or associate membership in the Association of Military Surgeons of the United States; that essays will consist of not less than ten thousand, nor more than twelve thousand words, exclusive of tables; that each competitor will send three typewritten copies of his essay in a sealed envelope to the secretary of the association, so as to reach that officer *at least one month before the next ensuing annual meeting*, in the present case on or before September 10, 1904.

The board of award is composed of Lieutenant Colonel John Shaw Billings, U. S. Army; Brevet Brigadier General George Ryerson Fowler, New York and Surgeon Henry Gustav Beyer, U. S. Navy.

E. B. TREAT & CO., announce the following books in press: The Blues. (splanchnic neurasthenia), causes and cure. By Albert Abrams, M. D., F. R. M. S. Octavo, 230 pages, illustrated, \$1.25. Diseases of Metabolism and Nutrition. Part IV. Autointoxication. By Prof. Dr. Carl von Noorden and Dr. Mohr. Authorised American edition. Edited by Boardman Reed, M. D. Small 8vo; 80 pages, 50 cents.

ITEMS.

MESSRS. SCHIEFFELIN & Co., New York, have placed us under obligations for a package of very fine flat pocket pencils, with point and eraser protected, for distribution to the editorial staff of the JOURNAL. One of the uses of the pencils suggested by the donors is to write prescriptions for hemoquinine. In case the point should be worn out in this process an extra tip is supplied for other uses.

THE DAILY MEDICAL JOURNAL will be published January 1, 1904. We need a physician as staff correspondent in every town in this state, to supply us with scientific, social, institutional and personal news, and will pay regular newspaper rates for this service. Instructions, stationery, and badge free; address Mr. J. Antchowvitsch, 15 East 72d Street, New York City.

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ORIGINAL COMMUNICATIONS.

Typhoid Gangrene of the Lower Extremities.

One Hundred and Thirty-four Cases—Spontaneous and Surgical Amputations—A Historical Resume.¹

By B. MERRILL RICKETTS, PH. B., M. D., Cincinnati, Ohio.

COMPARATIVELY few cases of gangrene of any locality are associated with typhoid. The disease occasionally attacks the lips, tongue, cheeks and genitalia. It has also been observed involving the fingers, hands, arms, toes, feet, and legs. It is gangrene of the feet and legs which will be considered at this time.

Gangrene of the lower extremities associated with typhoid fever is indeed rare compared with the great number of cases of typhoid fever throughout the world. There is no known cause; climate, habits, occupation and general environment do not offer any solution of the problem. It appears to be due to the bacillus typhosus, but this has not been proven. That the subject may be more fully considered the brief statistics of the reported cases are appended. Doubtless many more cases have occurred than those herein mentioned.

Pathology.—Gangrene of any part associated with typhoid is due to embolism, thrombosis, or inflammation of the veins or arteries, one or both, but more frequently the arteries. Gangrene is due to a plug, inflammation, anomalies and obstruction to collateral circulation and may appear at the crisis of disease, or at any time during the progress of the fever or during convalescence from the same.

When due to inflammation the process, as a rule, extends until all of the vessels of the extremities are involved, while in cases

1. Read before the Virginia State Medical Society, at Roanoke, September, 1903.

of embolism or thrombosis the process is more localised, with partial or complete destruction of the tissues beyond the occlusion, which may be at any point in the course of the vessel. The gangrene may involve a part or all of the circumference of the leg, usually a part when there is thrombophlebitis.

When both veins and arteries are involved, or arteries alone, the entire circumference is affected; there may or may not be tenderness along the course of the vessels. This is more frequently so if the veins be involved. The gangrene may be confined to the course of the artery involved with severe hyperesthesia. Occlusion of vessel or vessels may be partial or complete. One or both external iliac arteries or veins or all may be embolic, partial or complete, and partial paralysis may follow without any atrophy. Gangrene of feet and legs when double may be simultaneous or there may be an interval of days or weeks.

Fever may be high or low, or there may be none at all. Gangrene may be moist or dry, slow or rapid in its progress. Metastatic abscess may form in the kidney, liver, lung, spleen, pancreas, heart, or brain, and there may be spontaneous fracture of the long bones.

Surgical Amputation.—Amputation should be made as soon as gangrene is discovered and far enough above the diseased tissues to be reasonably sure that nothing but healthy structures and especially healthy bloodvessels are divided. If the lower leg is involved amputation should be above the knee-joint (lower third of thigh), as in such cases the occlusion is almost invariably in the popliteal artery. Mortality in both spontaneous and surgical amputation is higher in subjects over 40 years of age, and when amputation is delayed.

If there is great debility and surgical anesthesia contraindicated (which is seldom found), a rapid primary amputation should be made through the gangrenous tissues. The secondary amputation can then be made subsequently so that the work may be completed in two sittings. There are probably but few cases in which this course is necessary, or is to be advised. There are a few cases in which the gangrene will continue even after the amputation is made in normal tissue.

The more favorable cases for amputation are those involving the toes, feet and lower leg during convalescence. This is so in amputation of the lower extremities for any purpose, the mortality increasing as the upper thigh is approached.

Spontaneous amputation, as a rule, should not be encouraged. However, in a few cases in the aged where both extremities are involved with dry gangrene, slow in its development, with great debility of any kind of surgical anesthesia being contraindicated, it

should be carefully considered. If, however, the line of demarcation is established and amputation can be done rapidly above the knee or ankle without surgical anesthesia then spontaneous amputation should not be considered.

Personal Experience. CASE.—I was called in consultation with Dr. Loomis, Independence, Ky., in January, 1902, to see a married woman, aged 28 years, who had borne 2 or 3 children, and who was about the thirtieth day in typhoid fever. The right leg was gangrenous to the middle third of thigh, moist gangrene having first appeared in the toes eight or ten days previous to my visit. Temperature not unusual and with the exception of an endocarditis she was rather comfortable.

Amputation at the upper third of the thigh was decided upon and done immediately under the influence of chloroform. Time of amputation $1\frac{1}{2}$ minutes. The femoral vessels were occluded at the point of the first incision, but the femoral artery was opened with the snip of the scissors and ligated. The soft tissues were sutured with silkworm gut and drainage provided for with gauze. The shock was but slight and of little consequence. She rallied promptly, and did very well for 7 or 8 days, when she began to decline and dissolution took place on the tenth day.

Such cases are rare, and it is reported because of its rarity; also, that it may be considered with other amputations of the lower extremities for gangrene resulting from occlusion of the vessels during the progress of typhoid infection. This is one of three recorded case where amputation was made at the upper third of the thigh, and while death ensued 10 days after, the lesson to be taught is that such an amputation can of itself be made under such circumstances without fatality. For, if death had resulted from the operation in this case, it would have occurred within a few hours. The gangrene continued to extend after the operation and her death was, no doubt, due to the infection resulting from gangrene.

In two cases recorded in which recovery took place amputation was made of one leg and one thigh in each case. In two other cases both legs were amputated with recovery. It is reasonable to presume that the same rule holds good as to the amputation of the thigh for typhoid gangrene as it does for other causes. The question is first, should surgical amputation be resorted to in cases of gangrene of the lower extremities during typhoid fever, and should not the line of demarcation be allowed to form before surgical measures are adopted, or, at least, should it not be delayed until the patient's physical condition improves?

Statistics.—Of 134 reported cases 100 were male, 34 females; 128 surgical and 3 spontaneous amputations, 3 not stated; 15 both

legs, 41 right leg, 20 left leg, 15 both feet, 18 right foot, 16 left foot, 5 toes, 1 hands and toes, 3 middle thigh, 3 upper thigh, 2 lower thigh, 3 both thighs; 20 dry and 2 moist gangrene, 112 not stated; 6 recoveries with operation, 1 no operation; 34 deaths without operation, 22 deaths with operation, 12 unknown.

408 BROADWAY.

Influence of the Leucocyte Count in the Decision For or Against Immediate Operation.¹

E. S. VAN DUYN, M. D., Syracuse, N. Y.

Lecturer in surgery, Medical College Syracuse University; surgeon Hospital of the Good Shepherd.

FOR the illustrative purposes of this paper, fifty consecutive cases have been tabulated in which a leucocyte count was made prior to operation or at the time when the question of operation arose. The counts were made with reference to the additional information that could thus be gained as to the nature of the case, the presence or absence of infection, its character and severity. In dealing with surgical conditions, we know that when toxic material is being absorbed by the system, there is a polymorphonuclear leucocytosis present in the blood, and that when the material being thus absorbed is pyogenic in origin this increase of leucocytes in the blood is marked, its degree depending on the nature of the infection, the amount of material being absorbed, and upon the vitality or reaction of the patient. Further, that when the intoxication progresses and the severity of the case is increasing, there is present a proportionate increase in the amount of leucocytosis.

Basing our deductions on this principle, our endeavor was to determine by the leucocyte count, the presence of infection, the severity of its character, its extent and progress, and so decide as to the necessity of operation, its urgency and somewhat as to the prognosis. Many times the conditions found and the results obtained in these cases were proportionate with the amount of leucocytosis present, but in many of the cases, at first sight, there seem to be a wide variation. Apparently when this factor was alone considered these exceptions were so frequent that no great reliance could be placed on the deductions thus made.

A careful consideration of the many conditions that influence the presence and amount of leucocytosis is essential to a correct understanding of the meaning of the count. Only when all the conditions that affect the number of leucocytes are recognised and

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

proper allowance made for their influence, does the leucocyte count become of value as a guide. As these conditions are more carefully studied and considered and their influence becomes known and appreciated, the more constant and accurate becomes the leucocyte count as a basis on which trustworthy deductions may be made as to the presence, severity and character of any suspected septic process present. Care was taken to have the count accurate and made at as suitable a time as possible to exclude other conditions. Active digestion increases leucocytosis and an alimentary intoxication from disordered digestion often greatly increases the polymorphonuclear elements. Such states as fatigue, nervousness and fear, diminish the leucocyte count.

In one of these cases reported, a count of 19,000 fell to 6,000 during the progress of the chill and a single count taken at that time, if not correctly understood, would have been entirely misleading. Again, a leucocytosis is present in pregnancy, as is also illustrated in one of these cases. Moreover, those constitutional diseases which are associated with an increased leucocyte count must be recognised if present and due allowance made for their effect. When time permitted, repeated counts were made a few hours apart. The stationary or increasing character of the count obtained by such observations showed a slow or rapid progress of the trouble, and in doubtful cases, when not increasing a moderate count encouraged delay in operating until the nature of the case was better deducible from longer observation and further development of the symptoms. A rapidly increasing leucocytosis showed the presence of a progressing intoxication and indicated, where operation was in question, its early performance. In tabulating these cases, we noted, first, the symptoms, temperature, duration and general condition; second, the diagnosis as made from them; third, the amount of leucocytosis present; fourth, the deductions made therefrom; fifth, the operative or other procedures adopted; and sixth, the actual condition discovered by the operation, or as shown by the course of the subsequent events,

In these fifty cases, the lowest count was 5,600 in an anemic child with incipient tuberculosis involving the knee joint, and the highest was 37,000 in an acute appendicitis with peritonitis. Twenty of these cases showed no pus infection, while thirty did. In these first twenty, the count ranged from 5,600 to 14,600, but in eleven of them, the count was below 9,400, while in the nine others, the higher count without pus infection was explained by the other conditions present. These were as follows: one with a leucocyte count of 12,000 was a very acute case of catarrhal appendicitis, the appendix greatly congested and swollen, with a temperature from 101° to 102° , the symptoms of the case

increasing in severity. The second with a count of 12,500, also was appendicitis of only forty hours' duration, in which no pus was found, yet the culture made from the contents of the removed appendix, gave a culture of *streptococcus pyogenes aureus*. The third, with a leucocyte count of 12,500 was that of a patient whose condition was one of marked general malnutrition. The count increased after operation, and the patient died a week later, the wound showing a gangrenous condition without the slightest evidence of any healing process having been established. The fourth with 14,600 leucocytes, was complicated with pregnancy and in all the remaining cases, without pus and above 9,000, malignant disease was found.

In the thirty cases in which pus infection was found the count ranged from 7,000 to 37,000, but here again the acute infectious cases uniformly conformed with the rule given above, and gave a high count above 15,000. Of these cases below 15,000 with pus present, five gave a count below 9,000 here, three were tubercular, and two gave a pure culture of *bacillus coli communis*. In the cases between 9,000 and 14,000, nine in number, eight were cases of chronic abscess, or chronic pus tube, in which the symptoms were subacute and mild in character and the pus was found tubercular or gonorrheal in type, or confined to an abscess cavity, the walls so thickened and covered with pyogenic membrane that there was little absorption. The one case below 15,000 in which acute pus formation was found was a case of acute appendicitis in which the appendix was found ruptured and a small mass of thick yellow pus had been exuded. This pus laid directly at the point of rupture and was a dense circumscribed mass. The appendix was nowhere gangrenous and the wound closed entirely in less than a week. Here, from the condition found and the symptoms present, there seems no question that the rupture occurred just prior to the operation, or was caused by its manipulations. The leucocytosis present in this case was 11,600.

In these fifty cases then, twenty of them with a leucocyte count ranging from 5,000 to 15,000 with no pus infection present, and thirty, with a range between 7,000 and 37,000, with pus infection, there is an overlapping of forty of the fifty cases, or 80 per cent. of the total number. At first glance this would seem to preclude the possibility of judging by the leucocyte count as to the presence or absence of an infectious process; but when we subdivide them in this way and recognise the influence of the concurrent conditions, and take into account all that can be learnt from the other symptoms present, as to the probable nature of the infection, the duration and progress of the disease, we find

under stated conditions the amount of leucocytosis quite constant within narrow limits and positive as to its indication. Conclusions deduced in this way, become of value, and as the influence of all the conditions that modify the amount of leucocytosis are better understood, it becomes a more and more reliable indication of the presence or absence of an active infective process.

The points further deducible from the leucocyte count in these cases than the simple presence or absence of an acute infective process are, best shown by a brief recital of illustrative cases.

CASE I.—Male, 50 years old, general condition good, taken with sudden pain in epigastrium, vomiting and chill. Temperature 100° . History of previous similar attacks with pain always to the left of midline. On the third day of present attack, the pain became more severe and for the first time located in the region of the gall-bladder. Tenderness and increased resistance was present. Gall-duct obstruction was diagnosticated. A leucocyte count of 14,000 was found and a beginning pus infection was diagnosticated. Immediate operation was advised and performed. The gall-bladder was found much thickened and the tissues surrounding it were firmly united with it by newly formed adhesions. The gall-bladder itself was distended by a thin, bloody pus, which was evacuated and the cavity drained. Four days later the leucocyte count, which had fallen, rose to 19,000 and, on investigation, a small pocket containing a greenish yellow pus was found in the lower end of the abdominal wound. The leucocytosis immediately fell on its evacuation and drainage. In comparison with this, I cite a second case.

CASE II.—A woman, 68 years of age, with symptoms similar to those in the first case, excepting that they were less acute; there was marked jaundice, and the temperature did not rise above 99.5° . In this case the leucocyte count was only 6,000. Here no infection was considered present and this was borne out by the condition found on operation. The gall-bladder was thin, movable and contained a thin, clear gall and many stones, but no pus.

The next two cases, both of appendicitis, show, to a still greater degree, the same difference in the nature and degree of infection and the necessity of immediate operation. The first of these was a male 36 years of age, general condition good, had been suffering for ten days with the symptoms of a mild attack of appendicitis. The temperature never rose more than one degree above normal. On the tenth day the leucocyte count was 12,000. Operation disclosed a catarrhal congested condition of the appendix without pus formation. The second case, also a male, 16 years old, was seen first on the seventh day of attack. His temperature had fallen from 102° to 99° , and the patient was in an extremely apathetic condition. His leucocyte count was 37,000. Operation

disclosed two distinct pus cavities and drainage was left. Following the operation, however, the symptoms continued severe, leucocytosis only fell, 36 hours after operation, to 33,000 indicating the continued activity of the infectious process and an unfavorable prognosis. The wound showed an unhealthy appearance, the symptoms continued severe, fecal vomiting set in, and on the fifth day after operation the patient died.

In the first of these two cases, the low leucocyte count showed the absence of any marked degree of inflammation or pus infection and corroborated the previous diagnosis, verified by the operation, of a catarrhal inflammation of the appendix. In the second case, the high count showed clearly the severe nature of the infection, and that the fall of temperature and diminution of pain before operation, were due to shock and exhaustion, but not to an improvement in the condition. In both of these cases, immediate operation was indicated, but in the first, a good outcome was to be expected, while in the second, the unfavorable result obtained was only too clearly foretold.

When the infection is purely of a tubercular nature, there is a low leucocyte count, however severe the symptoms. This is well shown in the record of a ward patient, a male, 27 years old, who was sent in with a previous diagnosis of delirium tremens. His temperature ran from 100° to 103°. His urine contained much pus, many fine granular casts, and some blood. There was great tenderness and some boggiess over the area of the left kidney posteriorly, and the area of dulness was enlarged. Nephrectomy was performed. The kidney was found enlarged, lobulated and it contained many pockets of pus. The leucocyte count before operation and after was only 9,000, yet a week later he died of a general tubercular infection involving the meninges, both lungs and the peritoneum.

There were six cases in which the leucocyte count assisted greatly in making a differential diagnosis and prevented operation, though this course was strongly urged. The first, a female, married, 24 years old, was taken with sudden severe abdominal pains and tenderness, at first general, then localised above the pubes. The next morning, temperature reached 104.4°, the tenderness was more on the right side, and a slight chill preceded the rising temperature. These symptoms, with a negative Widal reaction, were considered to point to appendicitis. Two leucocyte counts taken several hours apart, showed only 7,600 and not increasing. On account of this lack of any leucocytosis, it seemed perfectly safe and better to wait the further development of the symptoms. On the fourth day the spleen showed enlargement, on the fifth, a profuse roseola developed, and on the sixth a positive Widal reaction for the typhoid bacillus was

obtained. In a second case of typhoid, also in a young lady 16 years old, with unusually severe abdominal symptoms, and an equally atypical temperature chart, the correct diagnosis was early made on a repeated normal leucocyte count, though the roseola was absent, and the Widal reaction remained negative until the tenth day.

The leucocyte count was of equal assistance and a protection to the patient in yet another case. Surgical interference was sought in a case of a young woman, 17 years old, the symptoms beginning abruptly with slight chill, temperature 101.2° , vomiting and severe abdominal pains and tenderness in the right iliac region. These symptoms gradually subsided, but ten days later they all returned with increased severity. Appendicitis was diagnosed and operation was urged, but the leucocyte count showed but 9,000, and an expectant plan of treatment was advised and followed. The menstrual flow began the next day, all the symptoms subsided and the patient's recovery has been permanent. Another case, seen in consultation, was that of a child 10 years old, with acute knee-joint trouble of five weeks duration. The temperature had been running a continuously elevated course of from 100° to 102.4° ; pulse small and rapid, child pale, thin, and emaciated, knee swollen, red, hot, painful and tender. A leucocyte count of only 5,000 showed no staphylococcic or streptococcic infection to be present, though the result of traumatism. Fixation and extension were advised, rather than any operative procedure to open the joint, and under this treatment the active symptoms quickly subsided. The fourth of these cases, a female, 24 years old, single, who had had trouble with a movable kidney for some years, was seized with sudden severe pain in her right side, and the question of infection arose. A count of 8,750 seemed to indicate no absorption of toxic substances, and under simple rest in bed the acute symptoms were relieved. The extremely poor general condition of the patient at the time operation was proposed, argued strongly against its probable success, and this procedure was fortunately contraindicated by the leucocyte count.

The next was the case of a girl 19 years, single, in bed eight weeks, with traumatic hysteria following a slight blow on the head. Much pain in the back was complained of, especially on the right side and radiating into the right leg. A sudden development of the presence of albumin and pus in the urine, with some granular casts, and scanty flow was diagnosed as abscess of the kidney, and the cause of the continued pain that has existed on that side, was thought to be found. The leucocyte count remained at 7,000 to 7,200, operation was delayed and in four days the urine entirely cleared and since then has remained clear.

In the last of these six cases, a female, 29 years old, delivered three days previously of a child, suddenly developed an intense painful swelling of the left parotid gland, the temperature ranging from 102.5° to 104.8° . Abscess from infective embolus was diagnosed, but as the leucocytosis did not rise above 8,000 incision was delayed, though strongly advised, and in four days all the symptoms subsided.

In the next two cases the leucocyte count was of the greatest assistance in indicating the amount of septic intoxication present at the time of operation, and so influencing the method employed as well as the prognosis after operation. A young man, 24 years of age, was operated on for intestinal obstruction. A gangrenous Meckel's diverticulum was found ruptured. Though its appearance was that of a recent occurrence, it was impossible to tell whether the rupture had occurred sometime previous to the operation, or just before, or during its performance. The leucocyte count taken just previous to the operation was only 9,000, in spite of the severity of the other symptoms present. The gangrenous area was excised, the intestine united with Lembert sutures and the abdominal incision closed without drainage. The conclusion drawn from the count of 9,000 that there was no considerable peritoneal infection present at the time of operation, was substantiated by the uncomplicated recovery of the patient.

The other of these cases, was that of a boy, 13 years old, who had been suffering ten days with what his physicians styled "a walking appendicitis." At the end of that time the abdomen became tense, and the pain increased and became general; temperature, 101° . Immediate operation was performed. The abdomen was found distended with a considerable quantity of thick, milky fluid, the appendix ruptured and bathed in a thicker pus. The leucocyte count taken just previous to operation, was 7,200 and in connection with a seeming general good condition of the patient, in spite of the severity of the condition found, a favorable prognosis was given. The fluid from the cavity and the pus from the appendix gave a pure culture of *bacillus coli communis*. This prognosis was verified by the recovery of the patient.

The last two cases are equally instructive as to the part the leucocyte count played in determining the necessity of immediate operation and the method to be employed. The first, a female, 33 years old, gave a history of an abortion a year before, following which she had suffered from an almost continuous uterine hemorrhage lasting five months, which left her in a very weak and emaciated condition. For the last three months she had constant increasing abdominal pain. On entrance to the hospital her temperature was 102° , pulse 120, and the clinical picture was one of

pus infection. So great was the exhaustion and so poor her general condition, any operative procedure would necessarily have been attended with the greatest risk. It was decided, if possible, to delay the operation and first improve her general condition. The leucocyte count was found to be but 11,600 and not increasing. Rest and stimulants for ten days improved her general condition quite appreciatively, but at the end of that time she had a chill, temperature rose to 104° , and the leucocyte count increased to 14,000. Operation disclosed the pelvic organs and lower bowel matted together in a mass of adhesion, and at the location of the left tube there was a mass to a large extent solid, but containing a small cavity of greenish pus that was ruptured during removal of the tumor, necessitating the use of abdominal drainage. The pathological report indicated that the tumor was a myxosarcoma. Although the condition of the patient after the operation was extremely low, the blood count showed a decrease of 2,000 and gave encouragement. Her gain, though slow, was continuous and at the end of six weeks she was able to leave the hospital. If operation had been performed at the time of entrance into the hospital, it is probable she would not have survived its performance, owing to her extremely feeble resistance.

In contradistinction to this case I will cite one more, in which the rapidly increasing and already high leucocyte count hurried me to immediate operation, which disclosed a condition the seriousness of which was not shown by the other symptoms present. Mrs. ———, 50 years old, previously well, was suddenly seized with a diffuse abdominal pain followed by vomiting and marked distention of the abdomen. Her bowels, however, moved freely. She was admitted to the hospital on the next afternoon with a temperature of 101.8° , pulse 100. Her general condition was seemingly very good. Her mind was clear and there was little nervousness or shock. Bimanual examination under chloroform disclosed no tumor or mass and was otherwise negative. At 5 p. m. the leucocyte count was 18,000; four hours later, it increased to 20,000, whereupon I did laparotomy. On cutting through the abdominal peritoneum a thick, badly smelling, greenish fluid gushed out in considerable quantity from the free abdominal cavity. A ruptured pus tube was found on the right side. Complete hysterectomy was performed and free drainage was obtained by the vagina. Her general condition continued good, and the following day the leucocyte count had decreased 2,000. On the next following day it had decreased to 13,000 and twenty-four hours later, had fallen to 9,000. Ten days later the leucocyte count suddenly increased to 15,000. A small mural abscess was found, which was evacuated and drained, following which the count dropped

again. The patient left the hospital three weeks later apparently well, all discharge having entirely ceased.

These cases of themselves are far too few from which to draw any rules to govern us in estimating the value of the leucocyte count as an aid in the question of the employment of operative procedures. They offer many suggestions however, and as they bear out the conclusions of others, based on extended statistics, and show the correctness of their deductions, they are both interesting and valuable. It is not the making of fixed rules between the grades of leucocytosis and any special pathological surgical condition that is of importance, but due allowance being made for the influence of possible concurrent conditions, it can be said in this class of cases first, that with a normal leucocyte count there is no pyogenic intoxication or active pus formation present; second, that a high degree of leucocytosis is a positive indication of the presence of a septic process; third, that an increasing count shows the severity of the condition present is increasing and indicates immediate operation; and fourth, a stationary moderate degree of leucocytosis allows delay in the employment of operative procedures. I should say that the line that separates a high count from a low one falls between 10,000 and 15,000.

With a leucocyte count above this line, other conditions permitting, in this class of cases, I should always advise immediate operation, however mild the other symptoms; especially would this be so when the repeated counts had shown an increasing leucocytosis. But when the other symptoms pointed strongly to the apparent necessity of operation, a low leucocyte count should not deter its immediate employment. While great assistance can be gained from the leucocyte count, the knowledge to be obtained from all the other signs and symptoms present lose none of their weight and importance and our conclusions should be deduced only after a careful consideration of them all.

318 JAMES STREET.

Keratoconus.¹

By G. GRIFFIN LEWIS, M. D., Syracuse, N. Y.

KERATOCONUS is a peculiar pathological condition of the cornea in which it gradually becomes more or less conical in shape without any accompanying inflammation, pain, loss of transparency or other ocular symptoms, excepting a gradual failure of vision. It is much more prevalent among females and when not

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

congenital usually begins between the tenth and fourteenth years of life, though often earlier, and proceeding very slowly, reaching its climax within from five to seven years. In any degree it may become stationary, permanently or only for awhile, and then undergo rapid increase. In some cases it may attain remarkable proportions. Dr. H. D. Noyes reported a case a few years ago which measured $\frac{3}{4}$ of an inch in length. As a rule, both eyes are affected, but one usually in advance of the other. When monocular it is generally very slight. The cone almost invariably points below the center of the cornea, which fact is probably due to the pressure of the upper lid and it never advances to bursting by extreme stretching, ulceration or sloughing.

Cases of keratoconus are comparatively rare, so much so that few are likely to come under the care of one surgeon, and it is usually well advanced when the unfortunates seek professional aid. According to the statistics of six of the largest ophthalmic hospitals in the United States there is only on an average, one case of keratoconus to every 7,206 eye cases. Literature on the subject is also very meager. The Index Medicus during the eight years from 1891 to and including 1899, only gives a total of six original articles and six reports of cases written on this subject throughout the world. The older works on ophthalmology treat more exhaustively of it than do the more recent ones. Bowman, Critchett, and Knapp perhaps have been the three most generous contributors of literature on the subject.

The causes of keratoconus may be classified into two groups, constitutional and local, the latter being dependent on the former. Heredity seems to figure somewhat in the etiology of this disease, as Bowman and others have reported several cases in the same family. Malnutrition and feeble muscular conditions brought about by severe or protracted illness, over-rapid growth, phthisis, feeble circulation, scrofula, anemia, chronic dyspepsia and menstrual disturbances have been observed to be associated with the development of conical cornea. The fact that it is more prevalent in females and that the period of puberty is the usual time of its incipency, points very strongly to menstrual disturbances as one of the leading factors in its causation. Typhoid fever, before or at the age of puberty, may bring about this condition. Derby says, "that considerable general change may take place in the system at large as the result of typhoid fever was first brought to my notice years ago by the study of a case where an emetropic patient went to bed with an attack of typhoid fever, remained six weeks, and arose with a marked and persistent change of myopia."

The immediate local cause is the disturbance of the relation

of the intraocular pressure to the resistance of the cornea, which may be due to one or more of the following conditions: (1) malnutrition, atrophy and diminished resistance power of the center of the cornea, which is farthest from the blood supply; (2) incomplete development of the center of the cornea which during fetal life is the last part to be formed; (3) muscular tension of the external ocular muscles, which in some cases has been known to exist before the conical condition of the cornea developed; (4) eye strain with the associated intraocular congestion and relative increase of tension. If the ciliary muscle plays an important part on the tension and alterations of the corneal curvature and if astigmatism may, in some instances, be the direct result of such action, and that too upon the healthy cornea, why could not a severe and long continued spasm of accommodation eventually produce a conical condition of a weakened, undeveloped or badly nourished cornea?

We know nothing definite of the pathology of this malformation of the cornea, but there is no doubt but that the bulging is preceded by an atrophy of the central part of that membrane, which is farthest from its source of nutrition. Whether this atrophy of the membrane is caused by defect or deformity from birth, and yields to internal pressure in youth is still an unanswered question. Dr. His found by experimenting upon guinea pigs that when he scraped the epithelium of the cornea off, that membrane became cloudy and protruded, and that although the cloudiness cleared up after awhile the protrusion remained. Dr. J. A. Spaulding says, "In the absence of pathological alterations subsequent to keratitis I should be inclined to attribute the cause to softening of the corneal tissues from dyscrasia similar to that which gives us white swelling of the knee,—the so-called scrofulous, for lack of a better word." Ranpoldi concludes from a microscopic examination of an eye affected with keratoconus that the changes in curvature must be sought in an alteration of Descemet's membrane and its epithelium, which changes are dependent upon constitutional conditions. Bowman states that the changes are confined to the laminated tissues of the cornea, as in the specimens which he examined microscopically, the posterior laminated and the epithelium both on the front and on the back of the cone were unchanged.

When the disease is far advanced the increased friction and the exposure of the apex sets up an interstitial keratitis, but bursting never takes place. This is, no doubt, due, as Bowman says, to the exosmosis of the aqueous through the thin cornea, thus reducing the intraocular pressure so that it is no longer in excess of the diminished corneal resistance. In its earliest stages

there are only subjective manifestations such as diminished acuity of vision and symptoms of asthenopia, and unless we examine very closely we will overlook the true condition. Subsequently, however, the bulging will be sufficiently advanced to give a peculiar brilliancy to the eye, like a drop of molten glass deposited upon the corneal center, and the pupil is apt to be large and sometimes the iris is tremulous. The ophthalmoscopic picture of the fundus will make the vessels appear broken and twisted. In the more advanced stages the cone may be easily seen through the closed lids as the ball is moved in different directions. The ciliary vessels may become somewhat congested and the apex may grow more or less cloudy.

The accurate estimation of the refraction in these cases is very difficult on account of the distorted and wave-like sides of the cone. Vision can never be brought up to normal and in the pronounced cases glasses are of little or no use. Those cases in which vision is improved by the use of eserine or by the pinhole disc are usually benefited by glasses. It is generally assumed that the general refraction in keratoconus is myopic. This may be so in the majority of cases, but fully one-third have hyperopic astigmatism, at least in one meridian. In handling these cases we should not be governed by the precise rules which usually aid us in the correction of refractive errors, nor place too much reliance upon subjective methods, but should rely upon objective measurements. As Mackay says, "The problem before us is to estimate the actual state of the refraction through a small area of the cornea situated as near the visual axis as possible." With this object in view it is best to examine the eye first with a dilated pupil, then with a contracted pupil. The direct ophthalmoscopic method is of no assistance. Retinoscopy, however, is valuable and upon it we can depend more than on any other method.

A peculiar shadow on the side of the cone opposite the light, which circles around the cone as the mirror is moved from side to side, is characteristic of keratoconus. This shadow may confuse us somewhat in our efforts to ascertain the refractive condition, but by using a disc with an aperture of from 3 to 5 m.m. in diameter, thus screening from view every part of the cornea except the limited area which we wish to correct, the process is very much simplified. The ophthalmeter and Placido's disc are also great helps in selecting the clearest part of the cornea. Often convex cylinders are accepted. In some cases convex cylinders placed at right angles to concave cylinders will give better vision than spherocylinders. In those cases which remain stationary stenopeic appliances sometimes render effectual assistance, but are not satisfactory for constant wear as they shut off too

much light and contract the visual field. This objection may be partially overcome by having a disc pierced with a series of small holes like the cover of a pepper box. Snellen constructed a pair of discs with a stenopeic slit running from left to right and ending in the middle with a sharp point, thus enabling the patient to read when the point in the slit is brought just in the visual line. Helfrich reports a case of a young boy who devised a lens consisting of a plain glass with a horizontal black strip across the center, the width of which was sufficient to shut off those rays of light which would naturally infringe on the conical part of the cornea. With this glass his vision was improved from 5-200 to 20-50. All these appliances, however, are very much objected to on account of their unsightliness.

Rahlmann was the first one to recommend the hyperbolic lens which in most cases, improves vision remarkably as long as the visual axis corresponds to the apex of the lens, but as soon as the patient turns his eye the least to one side the condition is worse than before. For this reason they are more suitable for close work than for street wear. The same objection pertains to the conical lenses recommended by Angelucci. The contact lens suggested by Herschell, which fits on to the front of the eyeball somewhat like an artificial eye, also improves the vision very much, but irritates the eye and is not long tolerated.

The treatment of conical cornea is, as a rule, of a very unsatisfactory character and relief is only relative. Some cases have been arrested in the early stages by a general alterative treatment, absolute rest, avoidance of violent physical exertion, open air, good food, hygienic surroundings, digital massage, correction of refractive errors, compress bandages, mydriatics, myotics and astringents. Culver reports good results from the use of the thyroid gland. Surgical intervention is to be advised only after other methods have failed and the patient is reduced to a state of helplessness, for the surgical treatment of conical cornea, besides being a tedious undertaking and beset with dangers, has certain cosmetic drawbacks and doubtful gain. Sir William Bowman was the first one to attempt to correct the optical defects of conical cornea by an operation. Having noticed the improvement in vision afforded by the stenopeic slit he endeavored to supply the latter permanently by performing the operation called iridodesis, or changing the pupil into a vertical slit by drawing the papillary margin into the corneal wound and leaving it there. This operation improved vision considerably in some cases, but it occasionally provoked cyclitis and sympathetic trouble. Von Graefe had good results in some cases by shaving off the apex of the cone without entering the anterior chamber, and then applying a stick

of mitigated silver caustic to the cut surface, thus producing an ulcer and eventually getting cicatricial contraction. This method was very painful and not infrequently set up a cyclitis. Bowen next invented a small trephine by which he removed a disc from the summit of the cornea. DeWecker also adopted this method and for years this was the favorite plan of treatment. Critchett then conceived the idea of removing a small elliptical piece of cornea at the apex, allowing the wound to heal without sutures. This method is also still practised by many eminent ophthalmic surgeons.

Dr. J. W. Buller described a case in 1897 in which he got an excellent result by passing a Graefe blade vertically through the apex and bandaging, then one week later passing the blade horizontally through the apex, removing a small piece of the cornea with a pair of iris scissors and bandaging again. Repeated evacuations of the aqueous humor have been employed more or less for many years, but without any pronounced result. The method most generally adopted of late years, and the one which is the least painful in its application and the least liable to subsequent complications, is cauterisation of the apex with the actual or galvanocautery. This may be applied in various ways. Abadie burns a deep furrow at the upper edge of the cornea. Callan cauterises at opposite points to the greatest curvature going down into the membrana propria of the cornea and repeats the procedure if necessary. Noyes recommended cauterisation of the cone without perforation. Weeks uses the same method. The great majority of operators, however, seem to favor Knapp's method of first cauterising the apex with an oval electrode and then piercing the eschar with a fine pointed electrode. This method is performed as follows: after dilating the pupil with atropine and cocanising the eye, an assistant gently raises the upper lid, as no speculum should be used or pressure exerted upon the eyeball. The oval electrode is placed cold over the apex and withdrawn as soon as it has been brought to a red heat. Then with a needle electrode, the size of which depends upon the amount of contraction desired, the center of the apex is pierced and the needle quickly withdrawn so as not to heat the aqueous too much and produce a traumatic cataract. For the same reason the electrodes are not allowed to reach a white heat, but are withdrawn as soon as they are brought to a red heat.

This method is easily performed, does not result in anterior synechia, allows rest and contraction of the cornea by the slow and continuous drainage of the anterior chamber and leaves a small scar. A moderately tight bandage is kept on most of the time following this operation and the increased tension which

is liable to follow may be combated with eserine. A few cases of cataract, cyclitis, or even panophthalmitis have been reported to have followed this method, but thus far it has been productive of more good results and fewer bad ones than any other and may be now considered the classic treatment. In cases where a somewhat extensive eschar has been unavoidable it may subsequently be necessary to make a small artificial pupil in the line of vision, preferably inward and slightly downward. Vision and appearance will also be somewhat improved by tattooing the corneal opacity with India ink, providing that membrane is not too thin to admit of it.

600 UNIVERSITY BLOCK.

Clinical History of an Abdominal Tumor.¹

By EDWARD JUDSON WYNKOOP, M. D., Syracuse, N. Y.

IN presenting this history the effort is made to show what seemingly trivial abnormalities may exist without receiving proper attention and what grave results follow their neglect.

W. K., male, aged 13 months was admitted to the Women's and Children's Hospital, November 13, 1902, with the following history: father living and well. Mother living but not in good health, and since taking this history, mother has died of chronic meningitis. Two brothers living and well, at 8 and 22 years, respectively. One sister living and well at 3 years.

Patient was a full-term healthy child. Labor normal. Child weighed at birth 9 lbs. Had always been a bottle-fed baby. When 4 days old had convulsions. These convulsions would occur as often as once an hour and lasted from 20 to 30 minutes, sometimes longer. For three days these convulsions continued. After these ceased and until the child was 3 or 4 months old, he was dull and apathetic. During this period he lost in weight and weighed less at 4 months than when born.

From 4 months on he began to gain in weight. During this period, however, he had some gastrointestinal disturbance; teeth developed slowly and the child was very irritable. During the last two weeks of October, he was very restless and cried almost constantly, and early in November the family physician was called and found a fracture of the right femur, lower third. No history of an injury could be obtained. The following day the x-ray was used and diagnosis confirmed. The child's leg was placed in plaster-paris cast and a few days later, as mother was not in condition to properly attend to the child, both mother and child were sent to the hospital.

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

Physical Examination.—Child fairly well developed but very anemic. Complexion resembled the cachexia of malignant disease. Weight not given. Temperature, 98.6. Pulse, 98. Head normal. Teeth regular, but dentition slow. Chest barrel-shaped. Rachitic rosary present. Abdomen prominent. Rachitic spine. In medium line just below umbilicus, a firm, hard tumor could be outlined with its base extending toward symphysis pubis. Tumor was about the size and shape of large egg. Skin freely movable over it. No fluctuation. Resembled to the touch a hard, firm growth. Tumor not freely movable. Marked phimosis present. Right thigh in plaster cast. Length of limbs equal. As the child had urinated freely and bowels had not moved it was decided to clear the intestinal tract and watch developments.

On leaving the hospital the family physician was consulted regarding the tumor. The only history obtainable from him was that the day the leg was placed in a splint the abdomen was unduly prominent, but this had always been the case with the child, so no particular attention was paid to it. November 14, child had slept during night fairly well, but at times seemed restless. Nourishment taken well. Bowels moved freely. Urine passed freely. Temperature and pulse about the same. Abdominal tumor unchanged. Examination of urine: specific gravity, low; alkaline, clear, slight trace of albumin present. No casts. In the afternoon Dr. Clifford Mercer saw the patient with me. Blood count, R. B. C., 2,480,000; W. B. C., 4,000.

From the location of the tumor it was evident that it was connected with the bladder and it seemed from the child's general appearance that a malignant condition might exist. A soft catheter failed to enter the bladder. A hard catheter was then tried but would not pass beyond the neck. At this time the marked phimosis was noted, but its relation to the abdominal tumor was not considered. Following the withdrawal of the catheter considerable urine was evacuated and the tumor seemed smaller but of the same consistency. It was now very evident that there was an obstruction to the flow of urine, probably at the neck of bladder. During the day the child had been restless and feedings were not taken as well as usual. No vomiting.

Dr. Jacobson and Dr. A. G. Doust saw the patient with me the next day. During the night the child had been restless and would not take food well. Temperature, 97.6. Pulse, 100. The abdominal condition was unchanged. It was decided to anesthetize the child at once and if possible introduce a catheter into the bladder. At this time Dr. Jacobson suggested the possibility of the tight foreskin being the cause of the trouble. After the child was anesthetized, a silver catheter at once entered the bladder; 7 to 8 ounces of clear urine escaped and the tumor subsided, leaving only a small hard lump just above the symphysis. Circumcision was at once done. The child rallied well from the anesthetic but began to fail during the evening and died about 9.30.

Autopsy.—November 16, 9 a. m., by Dr. H. S. Stensland. Length of body, 64 cm. Head not examined. Body fairly well developed; rather poorly nourished. Rigor mortis not apparent; no edema; well defined rachitic rosary; recent operation for phimosis. Peritoneal cavity: serosa smooth and glistening; appendix normal; mesenteric lymph nodes not enlarged; lesser peritoneal cavity and pancreas normal; bladder prominent, hard, enlarged and thickened. Organs all very pale. Pleural cavities: no adhesion, no fluid. Pericardial cavity contained a small amount of clear fluid. Heart valves, cavities and coronary arteries, normal. Myocardium uniform in color. Lungs pale and downy; posterior surface red and of firmer consistency. Spleen lymph nodules and trabeculae distinct. Gastrointestinal tract mucosa pale.

Pancreas, normal. Liver, brownish red, smooth. No adhesions about gall-bladder. Kidneys: left, large and lobulated; right, small, 3 cm. long; ureters and pelvis, long and tortuous; adrenals, normal; bladder, thick walled and large; urethral orifices patent. Aorta, intima smooth. Organs of the neck and brain not examined. Right thigh, separated at lower epiphysis; during manipulation upper epiphysis separated; shaft of femur surrounded by recent bloodclot. Left thigh, femur normal; epiphysis not easily separated.

Anatomical Diagnosis.—Chronic hydronephrosis; chronic hydroureter; distension and hypertrophy of bladder; malformation of kidneys; rachitis; separation of lower epiphysis of right femur; blood-clot surrounding shaft of right femur.

“Hydronephrosis is a condition of over-distention by fluid of the pelvis of the kidney, caused by obstruction of the normal outflow of urine through the ureter or through the urethra. It may be congenital or acquired, permanent or intermittent, unilateral or bilateral.”

There is usually a rapid atrophy of the kidney following the formation of a complete hydronephrosis and a portion if not all of the ureter is involved in the dilatation, according to the position and the completeness of the obstruction to the flow of urine. When the obstruction is complete rapid atrophy of the kidney follows and secretion ceases, whereas, if the obstruction be permeable to a small amount of urine, great dilatation is likely to take place; in such a condition hypertrophy of the parenchyma rather than atrophy is yet to be found. Congenital hydronephrosis when bilateral is rapidly fatal, the child seldom living longer than a few months.

The causes of congenital hydronephrosis are many, among them being imperforate ureter or urethra, congenital tumors, and the like. Acquired hydronephrosis may be caused by stricture of urethra, enlarged prostate phimosis tumors of neighboring organs,

and like conditions. Hypertrophy of the bladder may or may not be present. Double hydronephrosis is generally associated with or results in such changes in the kidneys that the patients die during infancy, commonly in the first year. In the great majority of cases the condition is unrecognised. Some English authorities believe that an indication of this condition can be obtained from the persistent low specific gravity of the urine, alkaline or neutral reaction, and the presence in it of a small amount of albumin.

The treatment of this condition is surgical. When the condition has persisted for some time and marked destruction has resulted, the mortality is high. A great many cases die in a few hours, whether the operation be circumcision or simply cutting a stricture. The cause of death is usually shock or uremia.

In regard to the case reported, the cause of the convulsions might be due to the condition of the genitourinary tract and not the gastrointestinal as is usual. Though sedatives were used to control these convulsions, would apathy remain for some three months without some other cause? The neglected foreskin escaped the notice of most of us and only by one was it mentioned as a possible cause of the entire trouble. The cachexia was so marked that malignant trouble was seriously considered. The size, shape and character of the tumor did not resemble in any way a simple distended bladder.

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210 JAMES STREET.

The Pathology of Asthma, with Special Reference to Its Vicious Circle.¹

G. N. JACK, M. D., Buffalo, N. Y.

AS THE circulation of the blood through the body was slow in being discovered, so also is its complexity, function, physiology and pathology equally slow in being determined. It therefore is not strange that the pathology of one of our most anciently recognised, torturous, dreaded and surprisingly common diseases, whose pathology as can now be shown lies positively in the blood, should be reserved for the present age.

1. Read at the 53d annual meeting of the American Medical Association, in the section on pathology and physiology, at Saratoga, June, 1902.

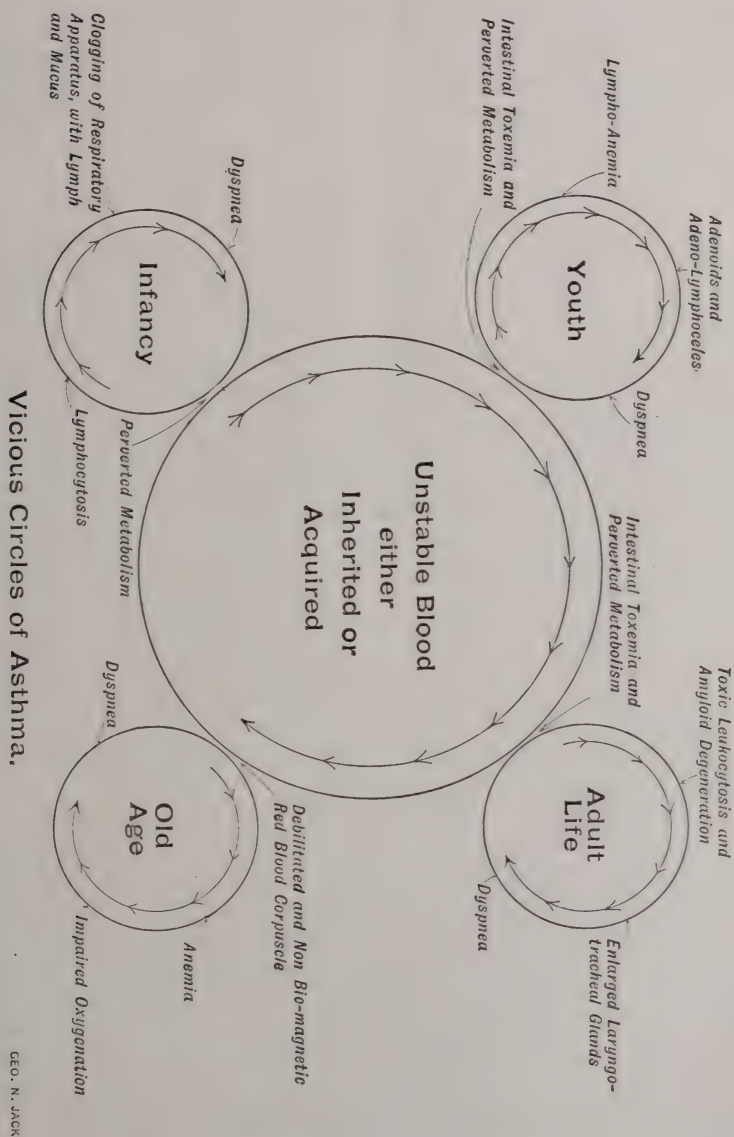
While there is no constant positively demonstrable pathognomonic asthmatic blood lesion, yet by repeated analyses of the blood of an individual asthmatic, before, during and after an attack, together with an intelligent, comprehensive and close observation of the clinical features of the case, combined with a mortaring in of all the facts thus gained by careful and repeated analyses of the sputum, urine and stool, an impregnable and imperishable wall of facts is constructed, that will ever stand in bold declaration of the blood origin of asthma, against all the theories of the past or future, that have been, or may be constructed.

It will be seen, then, that asthma is not a disease by itself having a well established entity, but that it is only a symptom, a part of a vicious circle, or an abnormal biochemical and complex pathological process, originating usually in the intestinal canal, through a long standing intestinal indigestion and toxemia, with faulty absorption and metabolism, producing a toxic or lymphogenous chyle that generates an unstable blood, characterised by its extremely varied, numerous and alarming paroxysmal, morphologic changes often alternating between a lymphocytosis, an intestinal toxemic leukocytosis, or a marked anemia: accompanied anatomically by a hyperplasia of the lymphatic and glandular structures and clinically by a most wretched and agonising dyspnea.

This definition makes it plain that the one characteristic pathological feature of asthma is the unstableness of its blood. During long periods of quiescence the blood of the asthmatic usually presents no demonstrable pathognomonic constituents, but repeated blood analyses during attacks most vividly picture its unstableness. During some attacks the blood will present quite constant pathologic changes, indicating throughout the attack a decided lymphocytosis, an intestinal toxemic leukocytosis or an anemia, but not infrequently we find the blood rapidly oscillating between these three varieties, and occasionally there will be a blending of two of the three abnormalities or of the entire group.

A most noticeable feature of asthma when studied in this light is that it progresses in vicious circles. Thus we find the fundamental principle of asthma or an unstable blood, either inherited or acquired, circling from infancy to senility, and springing from this unstable blood at different ages there is a vicious circle differing from the preceding and each one marking an advance of the disease. So evident is this advent that an acute observer could draw a circle for every year's duration, but only a few of the most pronounced are here illustrated. At infancy this unstable blood manifests itself in a vicious circle beginning

with a perverted metabolism, which results in a lymphocytosis, that in turn produces a clogging of the respiratory apparatus with lymph and mucus sufficient to cause the dyspnea.



During youth we observe an intestinal toxemia and perverted metabolism, lymphoanemia, adenoids and adenolymphocoeles and dyspnea. At adult life it has progressed to intestinal toxemia

and perverted metabolism, toxic leukocytosis and amyloid degeneration, enlarged laryngo-tracheal glands and dyspnea. In old age it terminates in a debilitated and nonbiomagnetic red blood corpuscle, anemia, impaired oxygenation and dyspnea.

The tendency of asthma, as it were, to progress in these vicious circles makes its pathology most interesting and fascinating, as it brings symmetry and definiteness out of chaos and confusion, which being as they are, in accord with nature, furnish another proof of its correctness.

THE ASTHMATIC LYMPHOCYTOSIS.

In considering the pathology of this group we must bear in mind the immediate close and essential copartnership of digestion, oxygenation and metabolism, and at the same time recall the physiological facts that fat food products after their absorption by the lacteals travel in all a distance of only about 27 inches, through the thoracic duct, left innominate, superior vena cava, right heart and pulmonary arteries, direct to the lungs for oxygenation, separation and classification before passing through any important digestive organ for modification; also that the other food products as proteids, are taken up directly by the blood through the portal circulation, which after passing through the liver for modification, immediately reach the lungs for further important chemical metabolic preparation. This lung and thoracic food, lymph, serum and blood sifting or filtering process, together with oxygenation, is made possible and facilitated by the physiological peculiarity of the lymphatic system that some of its vessels end and begin by open mouths in the pleura, which, therefore, for present purposes may be regarded as vast local expansions of portions of the lymph path.

It then is evident that there is a filtration as well as an oxygenation of the blood in the lungs which permits it to enter the lungs as thick, blue, sluggish, venous blood, and to leave them as thin, scarlet, active, arterial blood. With these few, simple, common and well known but too infrequently discussed physiological facts as a working basis, the pathology of the lymphocytic asthma, as shown by the clinical and demonstrable features of the case, become a certainty. As would be expected the most serious forms of this variety of asthma develops during lactation, and most frequently in fat, flabby muscled and scurvy-like infants, or in infants that are reared among unhygienic surroundings.

Infants of this class that are taking on and rapidly absorbing and assimilating large amounts of milk, do not infrequently, from some slight digestive disturbance, have their metabolism thrown out of balance sufficiently to generate a lymphogenous chyle, that

when carried to the blood acts more as a lymphagogue than a true hematogenic substance, and which when in turn is carried to the lungs for oxygenation and separation, nearly and in fatal cases actually drowns the infant in its own secretions. The clinical pictures of these cases carry with them a vast amount of valuable, open and unimpeachable evidence, that to the unbiased mind, furnish satisfactory proof of their lymphogenous origin, even without the clinching verdict of the microscope. The onset is sudden and with but very little warning. The child may give a few slight "shudders" twenty-four hours or so before an attack, and it is apt to be very peevish, worrisome, and possessed of an unquenchable thirst or desire to nurse, which the mother imprudently gratifies, thus hastening the on-coming attack.

The kidney, as the blood's ever diligent disposal plant and alert equilibrium preserve, is the first organ to detect the blood's dangerous condition and it endeavors to correct matters, hours before the attack, by filtering off as much as it possibly can of the useless material from the blood, which results in nearly a constant outpouring of a thin, pale odorless urine containing indican. During the attacks there is an extreme and alarming degree of cyanosis, and a dyspnea that nearly equals breathlessness. With each respiration mucus will bubble from the mouth in a frothy manner, and by turning the child over on its belly and shaking it, a thick, slimy mucus will string from its mouth. The digestive disturbance is manifested by flatulency and some vomiting. The kidney is working during the attack as it was preceding it, but after the attack the urine becomes scanty, high-colored and loaded with uric acid from the destruction of the white blood cells.

This alarming condition is almost instantly relieved by draining the lymph from the blood with epsom salts, and expelling the mucus from the respiratory apparatus. The blood count often shows as many as 94,300 white cells and usually 75 per cent. of these are lymphocytes. A vast majority of these lymphocytes are small, showing that they have come directly from the lymph channels and the chyle. Two of the above class of cases have, under my immediate observation, proved fatal, one of which I reported last October in a previous paper, suddenly expired in a severe cyanotic attack four months later. All other of my cases of this class I have thus far been able to rescue by a timely depletion.

In a few months after these severe cyanotic lymphogenous attacks, the child, not infrequently, develops the more constant lymphoanemic dyspnea, which, however, is always worse at night. The child soon becomes flabby-muscle, thin and pale, with a pronounced intestinal indigestion. From the first year onward this

alarming variety is usually entirely substituted for the more chronic lymphoanemic form which frequently results in adenoids of the nasopharynx, adenolymphoceles, and more or less engorgement and hypertrophy of the lymph spaces of the entire respiratory tract. The two cardinal factors in the production of the asthmatic dyspnea when due to a lymphocytosis are: (1), the hemoglobin cannot reach the oxygen in the lungs; (2) the oxygen cannot reach the lungs.

The hemoglobin is handicapped in reaching the oxygen in the lungs, first, by its being diluted with and thickly surrounded by lymphocytes; and, second, by a thickened and air-tight condition of the partition between the oxygen and hemoglobin, due to an accumulation of mucus in the lung substance. The hemoglobin is also often in grave or fatal cases still further excluded from oxygen, by a collateral engorgement of the lung capillaries with lymph. The oxygen is debarred* from reaching the lungs by their partially filling with mucus together with the trachea and larynx. In favorable cases, after an hour or so, the pathology changes and the lymph is gotten rid of by some being metamorphosed into normal blood substance, and the rest by elimination.

ASTHMA DUE TO A TOXEMIC LEUKOCYTOSIS.

The pathology of this most important group is best studied in sections of its vicious circle, taken up in the order suggested by the clinical features and determined by laboratory investigations. As previously shown this group has an unstable blood to start with and one that perhaps has passed through the lymphocytic variety in infancy, and had its disintegrating spells, to be followed by its rapid but frail rebuilding periods till early adult life, when we find a blood that is extremely sensitive to toxins, and one that also has great difficulty in maintaining its metabolic equilibrium. With a case under constant observation the first thing of pathological interest after a prolonged period of freedom, and preceding an attack, will be a rapid alteration between constipation, a fetid diarrhea and flatulency. After a siege varying from ten days to three weeks of this mild intestinal indigestion and toxemia, enough toxins are absorbed by the blood, together with those generated in the blood itself from its own perverted metabolism, to start it on its catabolic career. The kidney is the first organ to take note of the blood changes which results in the characteristic polyuria and indicanuria. The leukocytes and eosinophiles soon show an appreciable increase. The clinical objective and subjective evidence of a disintegrating blood at this stage are an occasional swelling of hands, feet and eyelids; tired, achy, lan-

guid and chilly sensations; drowsiness after meals, irritableness; an unusual snugness of collar, hoarseness and difficulty in talking.

The intestinal toxemia progresses until the stools become small, frequent, acid fermentative or alkaline cadaveric and possessed of a foul, irritating and penetrating odor that forces the inspector to turn away in disgust. This condition is soon followed by a pronounced chill lasting an hour or so, which, however, as a rule, has no febrile reaction. Following the chill the leukocytic count rapidly runs up to 50,000 or 60,000; 25 or 30 per cent. of which are, by a differential count, eosinophiles. After this count we can positively foretell the on-coming attack, for we now know we have a blood that has disintegrated and one that is loaded with a waste and useless material that must be gotten rid of, and we find that this is soon eliminated through the mucous membranes and expelled from the body in one or all of three ways,—namely, expectoration, diarrhea or vomiting.

The special, or if combined, principal route of elimination would be determined by both intrinsic and extrinsic etiological factors. The intrinsic factors would be (1), the excessively large number of dead leukocytes and other foreign matter in the blood, together with (2) the essential vital power that the blood has of separating itself from useless material, combined with (3) the fact that the only outlet or "dumping ground" for the blood is the mucous membranes. The extrinsic factors would be (1) the acquired and (2) the induced. Under the acquired we would have habitually an impaired vitality or chronic catarrhal condition of the mucous membrane of the region involved, which would constitute to the blood the line of least resistance, and therefore most naturally its chief "dumping ground." In the asthmatic we find this state of affairs in the mucous membrane of the respiratory tract.

About twenty-four hours after the chill the patient notices a pronounced bass-like change of voice and an unusual snugness of collar. The blood now has unloaded enough of its dead leukocytes and other useless material in the numerous glands situated in the larynx to cause a noticeable interference with respiration. In about two hours more the ventricular bands or false chords are so thickened and hypertrophied by an engorgement of the numerous wide lymph spaces found in them, which together with an engorgement of the many mucous glands located in the ventricles of the larynx and their ascending pouches, causes the ventricular bands to project into the lumen of the larynx far enough to catch sufficient air on expiration to produce a valvular action that nearly closes the air-tube. The little air that is forced out during the prolonged torturous and difficult expiration produces

a loud whistling, wheezing sound coming directly from the larynx, as shown by both auscultation and palpation. This engorged condition of the larynx, although located high up, is extremely hard to view, owing to the fact that in depressing the tongue to observe it the ventricular bands are put on a tension which conceals and pushes back the engorged glands.

After about twenty-four hours of this laryngeal dyspnea, the glands undergo a resolution and degeneration, with the expulsion of thick mucus, which is expectorated in lumps the size of a pigeon's egg and of a tough, tenacious, viscid consistency, which gives it an appearance of fat tissue and enables one to pick it up and handle it about with the fingers. On inspection it is found to contain several little grayish pearly balls, which on being unraveled and viewed under the microscope are found to be composed of delicate, convoluted spirals (Curschmann's) made of numerous individual filaments. Other portions of the sputum under the microscope, without staining, are found to contain numerous leukocytes, exhibiting bright, yellowish, coarse granulations; among these are numerous colorless pointed octohedral crystals (Charcot-Leyden's). Disseminated throughout the field are numerous eosinophilic granules derived from ruptured eosinophile cells. This mucus responds very readily to amyloid tests thus denoting its starchy nature or amyloid degeneration. The blood while at all periods responding to the iodine test has a more pronounced iodophilia at this stage than any other.

While iodophilia generally indicates toxemia, it in the blood of the asthmatic seems to point more to an amyloid degeneration, for at our institute we clinically have long known that foods rich in starch agreed very poorly with the toxic asthmatic. This starchy degeneration of the blood or leukocytes is also indicated by the fact that all starch eating animals, as the horse, sheep, monkey, and the like, are subjected to asthma, while the strictly carnivorous animals never have it. The origin of Curschmann's spirals, as I have shown in previous papers, is due to a plugging of the minute ducts of the small glands with dead leukocytes, until finally the tissue about the duct softens and gives way, which permits the expulsion of the filament-like plug. As these filament-like plugs individually exude from the numerous closely crowded minute ducts, into the lumen of the air-tube, their free ends are caught by the air as it passes out and in and twisted together, making the convoluted spirals. That this is the true origin of these spirals is still further proven by the fact that they are contained only in the mucus first expectorated, which would show that after the glands once become softened, and their minute ducts dilated, they expel their contents as fast as formed, without the

"duct plugging" or filament formation. The leucocytes, eosinophiles and octohedral crystals found in the sputum do, of course, come directly from the leucocytic blood.

After the softening of the laryngeal glands and the expectoration of their contents, the patient has a few hours of ease with normal respiration, when the dyspnea begins again, due to an engorgement of the glands of the trachea and bronchioles. The air now passes in and out through the larynx freely, and without any wheezing, to meet with obstructions farther down, as indicated by the location of the dry râles and the attitude of the patient. Owing to the blood's diminished alkalinity together with its leukocytic, toxic and amyloid condition, it is unable to utilise but a small portion of the oxygen that required such a strained muscular effort to furnish, hence the blood reaches the respiratory center in the medulla in a poorly oxygenated condition, which irritates the pneumogastric nerve, thus continually urging the diaphragm on to a still more rapid and strained muscular action, regardless of the quantity of oxygen the lungs may already contain, which tends to excessively dilate the lungs and produce a temporary emphysematous condition, that if long continued becomes more or less permanent.

The duration of this tubular obstructed dyspnea is about the same as that of the laryngeal, and it disappears by the same pathological process, throwing off the same thick, tenacious mucus which, however, seems to be expectorated in smaller sized lumps. With the beginning of the expectoration a constant cough develops, eliminating in a few hours over a pint of thick, sticky mucus, loaded with the white balls containing the asthma spirals. So thick is this mucus that when its receptacle is jarred the mass will tremble like so much jelly, and when diluted with water and emptied, it will adhere to the sides of its retainer and string down for nearly two feet, and if the vessel be turned back slowly a large amount of the mucus will draw back into it. Mucus of this nature is expectorated for about ten hours after which the spirals gradually disappear; with the disappearance of the spirals the expectorations become more profuse; the quantity of mucus expectorated at this period is appalling.

The cough is constant, and each cough usually results in the raising of as large a quantity of blood débris or mucus, rich with dead leukocytes and sweet tasting amyloid material, as could be forced into the mouth. While this pouring out of blood débris into the air-tubes, with its free expectoration, continues without interruption, there is but little if any dyspnea; but if for any reason the blood has its vitality reduced, as it is very apt to do when, for instance, deprived of the chemical and electrical effect

of sun or daylight, as in the night, so that it does not readily separate itself from the dead leucocytes and other débris, the dyspnea will return, and the expectorations cease or become greatly diminished. A striking proof that the dyspnea at this time is largely due to an excessively large number of leukocytes in the blood is found in the fact that it will disappear like magic within twenty or thirty minutes after the administration of a large dose of quinine in solution. During the eliminating and expectorating stage, dyspneic spells of this nature will occasionally suddenly develop, coming on nearly as often during daylight as night darkness. When coming on in the daytime the dyspnea will usually appear an hour or so after the ingestion of food, or when the digestion leukocytosis is at its height. Not infrequently, however, quite severe attacks will come on suddenly, and without any warning, while the patient is up and about, due to an accumulation of mucus in the trachea, just as one's nose will become stuffed up with mucus during an acute coryza, sufficient to preclude the entrance of air. Such attacks usually last for only twenty minutes or an hour, the patient experiencing immediate relief with the first expectoration.

This elimination and coughing period lasts for about ten days when it gradually subsides. Here the process usually abates. When as in protracted cases, it is continued further, the enfeebled blood and scurvy-like condition next manifests itself by producing spongy gums with extravasations of blood and a rapid accumulation of sordes upon the teeth. In about twenty-four hours the process extends to the larynx and upon hawking a rusty colored mucus can be raised. From the larynx the process soon extends to the trachea, bronchi and bronchioles, resulting in a frequent cough that is accompanied by a feeling of soreness in the chest and the expectoration of a rusty colored sputum, that not infrequently contains streaks of clear blood. The expectoration of mucus of this alarming character lasts about five days and with its cessation the patients rapidly gain in health and vigor. In one case the blood here gave another beautiful illustration of its infirmity by the production of a purpura hemorrhagic-like condition of a patch of skin the size of one's whole hand, located in the right anterior lower portion of the chest. Toxins starting this unstable blood on its catabolic career do not alone originate in the intestinal canal or from the blood's own perverted metabolism, but they may be introduced from some outside source as the toxins of syphilis or some simple blood infection. A case now at the institute after being cured of his digestive metabolic toxic asthma received a simple infection of the thumb which reestablished the old vicious circle.

THE ASTHMATIC ANEMATOSIS.

At the origin of this circle we have an unstable blood plus an old, withered, deficient and nonbiomagnetic corpuscle, that has withstood the vicissitudes of the other varieties of asthma, or has passed through a prolonged siege of malarial fever, lead poisoning, tertiary syphilis, or other blood debilitating process. This nonbiomagnetic and debilitated blood is at all times playing close to the oxygenating margin, yet at favorable periods, such as during a sun or electric light bath, owing probably largely to their magnetic influence on the blood, or following a cold sponge bath, or altitude owing to an increase in numbers, or a crowding together of the red blood corpuscles, there will be periods of no asthma. These short, sometimes only hourly periods of freedom, are suddenly followed by an attack, from some slight blood debilitating influence, as the lack of sunlight in the night, increased atmospheric humidity, south winds, ground dampness, or swampy districts, sudden climatic changes, over exertion, emotions, digestion leukocytosis, and numerous other causes to which this delicate and sensitive blood pathologically reacts.

Thus, owing to some individual peculiarity, we may find the attacks coming on night after night in one, after meals in another, during atmospheric changes in still another and so on, yet each and every cause of which, as we can now demonstrate produces a blood change sufficient to throw this delicately balanced blood over its oxygenating margin. The blood's inability to properly perform its oxygenating function, in the asthmatic anematosis, is not alone due to a loss of hemoglobin as in other anemias, but it is due more to the hemoglobin's unfavorable environments, or the asthmatic's abnormal blood biochemistry. These unfavorable hemoglobin environments are:

First. A diminution in the blood's alkalinity, said normal alkalinity constituting the basic principle of its oxygenation.

Second. A diminution in and impaired vitality of corpuscle substance as found in all anemias.

Third. A slight impairment of the rouleux formation, due to the toxic plasma.

Fourth. A diminution in animal electromagnetism.

There are many simple yet positive proofs that the dyspnea is in part, due to a deficient biomagnetism.

There is no loud wheezing, tubular obstruction, or Curchs-mann's spirals in the purely anemic dyspnea, and their appearance would indicate a complication with the toxic leukocytic variety, which not infrequently occurs. As in the preceding varieties the kidney is first to detect the blood changes, giving the characteristic variable asthmatic urine. It is hoped that

enough facts as collected and proven from time to time have here been given to wrest this truly torturous malady from the realms of mystery and quackism, and to safely land it in the hands of conservative physicians.

261 GEORGIA STREET.

A Plea For a More Conservative Treatment of Appendicitis.¹

By F. W. HIGGINS, M. D., Cortland, N. Y.

THE writer is well aware that he has chosen the unpopular side of the controversy in regard to appendicitis. Indeed, so many papers are being presented on the surgical treatment of this disease that one hesitates to bring forward the subject at all. My only excuse is that from cases recently seen I have concluded that it was necessary not to forget the grain of salt which must be taken with the extravagant statements of some of our operators.

Appendicitis is a surgical and a medical disease. In its consideration there is a radical and a conservative view. In this paper I have chosen to emphasise the conservative and medical treatment. I believe I yield to no one in my belief of the importance of surgical relief in proper cases. I do not hesitate to operate myself at once when the case demands. Still I believe it is timely to enter a plea for a more conservative treatment. In most of the discussions on this subject which are repeated at our medical meetings the burden is much the same. We are told that appendicitis is no longer a medical disease. As soon as a patient has a pain in his abdomen the case is to be considered as appendicitis and a surgeon to be called in. No time is to be lost. A leucocyte count is criminal, for the operation is delayed by so many minutes.

The entire fatality of the cases which die after the operation is to be laid at the door of the physician who did not call in the surgeon soon enough. Diagnosis is not a matter for consideration; the diagnosis is to be made while on the way to the patient with instrument case in hand, in fact the diagnosis is to be made when you hear the telephone bell ring. Or, to quote from their writings instead from memory,—“every case promising or unpromising, should be treated by surgical operation at the earliest possible moment.” (Murphy. *Sajous's Annual Analyt. Cyc.*, I., 479.) A reaction from this ultra and fantastic position is bound

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

to come. Those who are now doing two or three operations daily will themselves become more conservative after a few years. But it behooves us who compose the rank and file of the profession,—the ordinary practitioners,—now to take sober second thought that we be not carried off our feet by those who are bulling the appendicitis market.

Pathologists are apt to become pessimistic. Who that has seen a series of appendices, secured postmortem or by operation, swollen, red, and sometimes adherent to surrounding organs, might not at first blush concur with the oft repeated statement of the surgeon to the family, that these were removed just in time to save life, and that the case would surely have proved fatal without an abdominal section. But other inflammations, equally severe, undergo perfect resolution. We do not cut away typhoid ulcerations which are just as marked as those of the appendix. A phlegmonous inflammation of the external auditory meatus looks as bad as the majority of removed appendices, but it gets well much better without an incision than with one. One does not operate now on all cases of lacerated cervix. The statistics of recovery without operation are very difficult to obtain. Most of us have too limited experiences in private practice to give a table that would not be worthless. Hospitals publish their operated cases but not so often the percentages of cure treated medically.

Treves (*Brit. Med. Journ.*, June 28, 1902,) in a recent carefully prepared and judicial paper, says that the mortality in medically treated cases is 5 per cent. If one takes account of slight and doubtful attacks this would be, I believe, about correct. If only well-developed cases be considered my own experience would be that it is about 10 per cent. General peritonitis is not the only fatal complication. Infected thromboses, metastatic abscess and cardiac infection, such as occur in other acute germ diseases, prove fatal in operated and nonoperated cases. Treves says that the mortality for operated cases in an acute attack is 20 per cent. Deaver, who is having as large an experience as anyone in this country, has had over 15 per cent.

Some of the would-be authorities on appendicitis give very misleading figures. Let me quote: "The surgical death-rate in acute and chronic appendiceal cases, without abscess, is a fraction of 1 per cent. at the hands of several American surgeons, and it is believed from classified data that the eventual death-rate in appendicitis cannot be much less than 25 per cent." (*Morris, Med. Times*, April, 1898). Uncritical reading of such a statement would leave the impression that 24 per cent. of cases of appendicitis could be saved by several American surgeons. Com-

pare with this estimate the actual results reported by Richardson & Brewster. (*Boston Med. and Surg. Journ.*, July 14, 1898.) Of 464 acute cases, 284 were operated with 63 deaths, a mortality of 21 per cent. Out of 180 cases treated medically 31 died, a mortality of 17 per cent. They justly remark that some of the cases treated medically might have recovered by operation. On the other hand, some of the operations were probably unnecessary.

I am well aware that the figures mean little, but they are the best we have. Cases operated on in the interval have a slight mortality, perhaps less than 2 per cent. by skilled operators. If one takes out the healthy appendix, as some do in order to swell their statistics, the percentages may not be greater than 1 per cent. I am well aware of an argument in favor of radical operation in all cases, which is the liability of recurrence in cases which recover without operation. But the liability to hernia in the cicatrix, the secondary operations for adhesions and the recurrences which have been found even after operative interference go far to offset this argument. I have now under observation a letter carrier, who had a well-marked appendicitis in May, 1898. For six months afterward he was tender in the right iliac region. Since that time he has done his work with no recurrence or symptoms. About a year later I saw a rugged middle-aged carpenter in consultation. The symptoms of appendicitis were plain. We prepared for operation the next morning. At that time the patient was so much better that we waited further developments. He has been at work every day since. One patient of mine, a working man, had a sharp appendicitis in 1893. We deferred operation from day to day. He recovered without surgical intervention and is now perfectly well, never having had a recurrence.

The question whether recurrences have happened is difficult to settle in many cases. We most often decide from a description by the patient of symptoms had years before. To present some slight basis of facts myself, however, I have obtained the experience of five of the physicians in our place who have been in active practice for several years. Combined with my own experience 21 per cent. of our cases have recurred. I believe appendicitis to be an infective inflammation often caused by traumatism or extension from the cecum. Resolution may be as complete as in any other structure with no predisposition to future attacks. But if a second attack occurs showing that there is probably an anatomical change produced, an interval operation is indicated. It is a close parallel to tonsillitis. Here we must evacuate pus if a retrotonsillar abscess forms, but a radical tonsillotomy is to be avoided in the presence of active inflammation. This would incur too great risk of opening up

fresh avenues to bacteria and their toxins, which are now being walled off.

Permit me in few words to sketch what I believe should be the conservative treatment of this disease. Rest is all important. No cathartics should be administered, but large colonic flushings with salt and water or linseed oil should be given at the very beginning of the attack. Hardened feces retained in the head of the colon or a nidus of bacterial culture may be thus washed away. Food should be interdicted absolutely in order that peristalsis shall be reduced to a minimum. Frequent and deep pressure over McBurney's point must be avoided. I am quite sure I knew a resolving appendicitis lighted up and the young lady's life sacrificed by a consultant who felt he must palpate the diseased appendix. A careful watch of the case must be instituted with the help of a trained nurse. If an abscess forms it must, of course, be opened as should a collection of pus elsewhere. In most cases it is better to leave the appendix, which forms a part of the abscess wall, to take care of itself under drainage.

The signs of abscess formation are not absolute but must be considered carefully as would any other internal disease. As helpful, may be mentioned slight dulness and leucocytosis. Conclusions drawn from attempts to palpate the appendix are entirely fallacious. If pus does not form too rapidly resolution is to be expected. I know of no disease, however, which is to be watched with greater anxiety and care. We are told that this uncertainty could have been avoided by an operation during the first 24 hours. But at least 60 per cent. of the appendices so removed would be normal. The only symptoms present at that time cannot be distinguished from a colic due to indigestion.

The strongest argument set forth against delayed operation has not yet been mentioned. It is that the appendix may rupture early into the free abdominal cavity with the formation of no limiting inflammation. This does undoubtedly happen, but is of very rare occurrence. It would most often be announced by a general peritonitis before any symptoms would have called the attention of surgeon or physician to the presence of the larva disease. In the face of a developed general peritonitis from such an accident, abdominal section is of little use. By far the best results are obtained from following Ochsner's plan of treatment, namely, avoiding all cathartic or other medication, washing out the stomach, and abstaining from all food by the mouth. These measures have proven of the utmost benefit in two recent cases where I have recommended the plan. Should the general peritonitis subside as it sometimes does under this treatment, any

local collection of pus or a diseased appendix may be later removed.

To summarise: my opinion is that our cases of appendicitis should be treated as medical cases, carefully watched, operated when indications demand, after careful unprejudiced consultation. Interval operations should be recommended after a second attack. In this way I believe the largest percentage of our cases will be preserved in life and returned to usefulness.

DISCUSSION.

Dr. N. S. JACOBSON, Syracuse: It does not seem to me a paper of this kind should go unchallenged in a body like our own. I think that anything but a conservative statement of the situation was the introduction of the paper, namely—that it is customary that the diagnosis should be made on the way to the patient, or the decision to operate made before the patient is seen. I am sure that all of us believe in conservatism, but our definitions of conservatism may differ. My own idea of conservatism is that which saves life, and I believe that which saves life is the most conservative measure to adopt in any case. I am sure those of us who are brought face to face with cases of appendicitis that are surgical cases (cases that have been treated as medical cases, and turned over to us when all medical hope has been abandoned, and sometimes when all other hope has to be abandoned also), have every reason to believe that the procedure which has antedated our connection has been anything but a conservative one.

I do not think any one here will claim that the mild cases of appendicitis, which show no acute disturbances during the first 24 hours, which show a disposition to subside after 24 hours, that the second day show improvement, and the third still more, demand any operation during that first attack. The very statement of the reader of the paper, that after the second occurrence of such a manifestation he would advise an operation, shows for itself that he cannot take the position that appendicitis is a medical disease. Now, I feel sure with that statement we can agree, namely,—that in those mild cases which have twice recurred, there is evidence of a lasting lesion which demands attention, and therefore that class should be treated surgically; but you and I, Mr. Chairman, have had the opportunity to see those cases which did not allow 24 hours delay. We have seen cases where four or five hours after the first manifestation, with no attack before, there has been a general widespread infection, and the patient has been practically moribund, or beyond help when the surgeon is called in.

I know of no condition which demands more careful investigation than that disturbance of the appendix which we speak of as appendicitis, and I believe a careful examination of a case

that shows progression after the first 24 hours, indicates that it is not a medical but a surgical disease. I believe that those cases of appendicitis which show subsidence of all symptoms after 24 hours should not be operated upon, and the very fact that every surgeon has occasion to operate during the quiescent period shows, and the fact that he recommends it also shows, that he does not himself believe that all the cases of appendicitis demand an operation during the attack; but, I think, the author of the paper was most unfortunate in comparing an infected tonsil with an infected appendix, and in making the statement that it was as unwise to cut through an infected appendix as it was an infected tonsil. The conditions are absolutely different. When you remove a diseased appendix you go outside of it, but how often can you go outside of the tonsil? You would simply be cutting through tissue, while many times we are able to remove an infected appendix and still carry our work outside and into tissue not so badly involved. But it seems to me that the more we have occasion to see this disease, the more we are satisfied that the large percentage of cases demand surgical operation; and I think the poorest argument that can be presented is the word of statistics. I do not see how you are going to compare these cases on the basis of numbers, or so-called statistics that are gathered by surgeons in hospitals.

Those of us who have surgical work to do in hospitals know it is the dumping ground of all kinds of cases, and we have to receive for operation cases advanced, cases acute, cases curious, and all kinds of cases that come into the surgical ward for operation. Would you think of comparing the results of such cases with the result of a class of cases that have been treated medically? Because they have not been acutely infected, and because they are not gangrenous, and because they do not involve the general peritoneum, shall we say they are to be compared, when the only estimate is one of figures, one of so-called results?

It is utterly impossible to compare results in such a case, but I do know that, given a case of appendicitis, if it is strictly a case of appendicitis, no matter how infected it is, provided there is no development outside of the appendix, the chances are that every case operated on will improve greatly. The death-rate is not due to the appendicitis, but it is due to the fact that the disturbance has spread out of the appendicitis and has involved the peritoneal cavity. So, I believe that it is fair to say that the conservative procedure is, that in progressive appendicitis, progressing into the second and third day, without signs of abatement, surgical and not medical, and if we are to treat a class of cases as purely medical, it shall be that class which shows marked improvement on the second day.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

Section on Medicine, November 10, 1903.

REPORTED BY WM. IRVING THORNTON, M. D., Secretary.

THE regular meeting of the medical section was held Tuesday evening, November 10, 1903, at the academy rooms in the Public Library Building. The meeting was called to order at 8.45 o'clock by the chairman, Dr. A. W. HURD, whereupon the minutes of the last meeting were read and approved.

The chairman spoke of the death of Dr. Cornelius C. Wyckoff, and suggested that appropriate action be taken by the section. On motion, the chairman appointed as a committee to draft resolutions, Drs. Chas. S. Jones, A. W. Bayliss and H. G. Matzinger.

The paper of the evening was presented by Dr. EUGENE WADDIN, entitled,

SOME CLINICAL OBSERVATIONS ON TYPHOID FEVER.

During the course of his remarks, charts from a number of cases of typhoid fever were presented, which tended to show the normal duration of pure uncomplicated typhoid to be 14 days, and in nearly all cases which extended longer than that period, a marked diminution of temperature was seen upon the fourteenth day. Cases lasting 21 days were explained upon the ground that two cycles, each of 14 days, existed overlapping one another; the second cycle beginning at the second week of the disease and due to a secondary or autoinfection of the body with the typhoid organisms. On account of the great frequency of bronchial and lung complications in typhoid, the mode of infection was considered to be by the respiratory tract, rather than through the gastrointestinal tract.

The paper was discussed by Drs. Rochester, Kenerson, Thoma and Ingraham.

The committee appointed to prepare resolutions upon the death of Dr. Wyckoff then reported as follows:

WHEREAS, Dr. Cornelius C. Wyckoff died November 7, 1903, at his residence in Buffalo, at the advanced age of 81 years and, after more than half a century of honorable, active service in the practice of his profession to the day of his death, was taken from our midst, the city of Buffalo thereby losing a loyal citizen, and the profession a respected member, whose devotion to his profession and his many friends we commend; therefore, be it

Resolved, That the section of medicine of the Buffalo Academy of Medicine expresses its appreciation of his honorable career and its sorrow at the loss of a devoted member, as well as its profound sympathy to the bereaved family.

The preamble and resolution were adopted, ordered spread upon the minutes and a copy directed to be sent to Mrs. Wyckoff.

The meeting adjourned at 10.10 p. m. Members present, 34.

PROGRESS IN MEDICAL SCIENCE.

Orthopedics.

CONDUCTED BY PRESCOTT LE BRETON, M. D., Buffalo.

A NEW PRINCIPLE 'OF CURING SEVERE CASES OF CLUB-FOOT.

OGSTON (*British Medical Journal*, June 21, 1902), relying on the fact that ossification of the tarsal bones is completed at a late date, has devised a new operation.

After the application of an Esmarch bandage the tendo Achilles is divided. An incision is then made from in front of the external malleolus to the calcaneo-cuboid joint, dividing all tissues to the bones. By means of a Volkmann's spoon, the bony center of the astragalus is scraped out leaving the cartilaginous shell, and a small amount of bony tissue between the malleoli. If necessary the cuboid and the anterior end of the os calcis are also scraped. The foot can then be placed in a corrected position, as it is as soft and pliable as a squeezed orange. The incision is sutured and dressings applied. Blood-clot fills the cavities and bones of correct shape reform. This method is applicable to children up to 6 or 8 years old. The after-treatment is considerably shortened and it is believed that the growth of the foot is not affected.

H. Augustus Wilson, (*American Medicine*, January 31, 1903), in commenting upon this operation, says that both the Phelps' and the Ogston's operations are in marked contrast to the non-cutting methods advocated by Lorenz and must direct attention to the necessity for early correction with the least possible cicatrix, to the avoidance of undue restraint and to the early development of muscles which alone can induce normal functions.

Lauenstein, (*Centralblatt f. Chirurgie*, XXX No. 39, quoted by *The Journal of the Amer. Med. Asso.*) advocates this method of enucleating the bony kernel. He advises an x-ray examination before operation to enable the surgeon to decide what bones to attack in each individual case.

THE BEST METHOD OF CORRECTING DEFORMITY AT THE HIP.

GIBNEY (*New York Medical Journal*, July 25, 1903,) regularly adopts Gant's subtrochanteric osteotomy in correcting deformity due to hip disease, deeming it more safe and more uniformly successful than forcible correction. He admits that there have been innumerable cases where brisement force has been employed without any outward symptoms, but on the other hand even in selected cases, the old inflammatory process may reappear and even cause abscess. Everyone must admit that it is exceedingly difficult to determine when a joint is ready for the employment of forcible correction. A certain number of cases relapse after osteotomy, but the same may be said for the other method. It has long been his conviction that the plaster-of-paris splint should be kept on a long time after osteotomy, from three to six months. The osteotomy should be subcutaneous, because the osteotome is just as tractable in the hands of a skilful operator as the tenotom. Although many patients prefer a slight flexion after operation, so that they may sit more comfortably, Gibney is convinced that the limb should be left as straight as possible. The patient then walks a great deal better and is in less danger of developing a painful hip in after years.

A NEW METHOD OF CORRECTING FLEXION DEFORMITY AT THE KNEE.

WHITMAN (*New York Medical News*, February 7, 1903,) believes that there is no deformity more difficult of correction than this, because of the backward dislocation complicating the flexion and the frequent contracture of the flexor tendons. Usually in straightening such a joint the end of the femur is the fixed point and the tibia is used as a lever. Whitman has had success from using the femur as the lever and the head of the tibia as the fixed point. The child is placed face downward and the head of the tibia held firmly in position on the table, pillows supporting the rest of the body. Massage and forcible stretching of the hamstring tendons are first employed. A carefully applied plaster-of-paris bandage holds the correction obtained after the manipulations. Very little discomfort follows and backward dislocation is less likely to occur. This method is useful also after the subsidence of acute symptoms of various conditions, such as gonorrheal arthritis or typhoid arthritis. Where it is impossible to straighten the limb by this means osteotomy of the femur above the joint may be done.

THE DIAGNOSIS OF HIP DISEASE.

LOVETT (*Interstate Medical Journal*, September, 1902, quoted by *Therapeutic Gazette*, February, 1903,) maintains that many cases

likely to be classed as tuberculosis hip disease are not tuberculosis. He followed the course of a large number of cases in which the early diagnosis was hip disease. Forty-five of these eventually proved to be tubercular. A group of twenty-one cases, all of which recovered in less than four months, presented at the outset typical symptoms,—atrophy, night-cries, pain in the knee, muscle spasm and loss of gluteal fold. Some of these must conform to Koenig's synovial type of acute infectious coxitis, others traumatic and rheumatic synovitis, or epiphyseal hyperemia. Fourteen other cases resolved themselves into infantile paralysis, osteomyelitis, coxavara, arthritis deformans and seven questionable nontubercular affections. Of all of the signs given "thickening of the trochanter" proved the most reliable. The *x*-ray was also of great value in early diagnosis.

THE TREATMENT OF ACETABULAR DISEASE OF THE HIP JOINT.

BRADFORD (*Annals of Surgery*, 1902,) describes an original method of dealing with a tubercular focus confined principally to the acetabulum. The treatment offers special difficulties as drainage of sinuses ordinarily is incomplete and pelvic abscesses are likely to form. The usual excision of the joint does not allow free drainage, as the remainder of the femur interferes. Excision of the acetabulum is too severe. Nature attempts to heal such cases often by subluxating the head of the bone by muscular spasm in the effort to relieve pressure on diseased areas.

Bradford in three successful cases has cut down on the joint posteriorly, dislocated the bone upward and inserted into the acetabulum a glass drainage tube about one inch in diameter, through which applications of carbolic acid and alcohol could be made. The leg is flexed and abducted and held in plaster-of-paris. The tube is kept in place a long time until healthy granulations appear. The patient is allowed to go about on crutches. After healing is complete subtrochanteric osteotomy corrects the position of the leg. This is a life-saving measure introduced to replace amputation at the hip.

PRIMARY TUBERCULOSIS OF THE VERTEBRAL ARCHES AND PROCESSES.

EASTMAN (*Amer. Journal of Surgery and Gynecology*, April, 1903,) discusses cases in which the focus is not located in the bodies of the vertebræ. This superficial form is more frequent in adults and no kyphosis follows. Local tenderness exists and patients may continue to work until sinuses appear. Operation and cure are the rule, the scraping of the spinous processes or lanunæ being easy and satisfactory. Of course, this "posterior vertebral disease" is a rare condition.

SELECTION.

The Perfected Treatment of Fibroid Tumors of the Uterus.¹

By LEWIS S. McMURTRY, M. D., Louisville, Ky.,

Professor of Gynecology and Abdominal Surgery in the Hospital College of Medicine.

THE time allotted each paper on the program does not permit a consideration of the important pathological and clinical considerations appertaining to fibroid tumors of the uterus. It is my purpose to present briefly the results of surgical treatment for uterine fibroids and the methods which have been evolved by many operators to bring about the existing brilliant and satisfactory results of operative treatment.

The large abdominal tumors which so commonly obtain in women are, as a rule, ovarian cysts and uterine fibroids. Both the ovarian and uterine neoplasms mentioned are very common: they destroy life by pressure, hemorrhage, and the degenerative changes to which they are subject, and individuals affected with these growths can only be cured by surgical extirpation of the tumors. Ovariectomy was the first operation established in abdominal surgery, and in connection therewith all the pioneer work was done. Ovarian tumors were from time immemorial recognised as fatal if left to their natural progress, and surgery was invoked for radical cure early in the nineteenth century. Beginning with McDowell's decisive work in 1809, ovariectomy was cultivated by various able and original surgeons in America and Europe until the operation was established and, after Lister's discoveries, quickly advanced to the position of the most successful major operation known to surgery. It was quite different with fibroid tumors of the uterus. With the exception of a few cases, the operation for fibroid tumors of the uterus was not generally considered or practised until a very modern period, and was not placed upon a high plane of diminished mortality until within very recent times. I allude here, of course, to the treatment of interstitial and subperitoneal tumors; the operative treatment of the so-called fibroid polyp, which is an extruded submucous fibroid tumor, being quite simple and outside the peritoneum. As illustrating the recent origin of this great surgical achievement, I may mention that the operative procedure as now practised has been built up by men yet living. At the meeting of this association in Louisville about ten years ago, Dr. R. S. Sutton, of Pittsburg,

1. Presented to the Mississippi Valley Medical Association, at Memphis, Tenn., October 7, 1903. Reprinted from the *Denver Medical Times*, December, 1903.

reported a successful operation and predicted that the time would come when the operative treatment of uterine fibroids would equal in results and attain the high position in professional confidence which had obtained then with ovariectomy. That prediction has now been verified, and it is gratifying to record that this great surgical achievement is for the most part the work of American surgeons.

The classical teaching relative to uterine fibroids is in some respects peculiar. Professional authority generally, and even among gynecological writers, was long directed toward establishing a belief in the innocent character of these growths. They were regarded as of minor importance in comparison with ovarian tumors, and it was the classical view that they disappear at the menopause. To urge a suffering woman, breaking down under pressure symptoms and hemorrhage, to be patient until that period, and to administer opium for pain and ergot for hemorrhage was the generally accepted practice. When, in a good proportion of cases, the tumor would undergo degenerative changes, or necrotic or suppurative changes would take place, the growth was pronounced malignant and only mitigating treatment remained to be utilised in the patient's behalf.

Washington L. Atlee, of Philadelphia, a great pioneer in abdominal surgery, portrayed many of the dangers of uterine fibroid tumors in a prize essay which appeared in the Transactions of the American Medical Association in 1853. It was only, however, after Lister's epoch-making discovery that their degenerative possibilities became known and appreciated, a result of the opportunities it afforded to confidently undertake operative treatment and study these tumors in the living. August Martin, in 1890, tabulated the degenerations and complications met with in a series of 205 cases as follows:

Fatty degeneration of tumor.....	7
Calcification of tumor.....	3
Suppuration of tumor.....	10
Edema of tumor.....	11
Cystic degeneration of tumor.....	8
Telangiectasis of tumor.....	3
Sarcoma of tumor.....	6
Carcinoma of cervix uteri.....	2
Carcinoma of corpus uteri.....	7

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Dr. C. P. Noble, of Philadelphia, in 1903, made observations upon a series of 258 cases, and recorded the following complications:

Appendicitis	9
Bilateral hydrosalpinx	10
Unilateral hydrosalpinx	7

Hematosalpinx	1
Calcareous infiltration	5
Cystic degeneration of ovaries	2
Ovarian cyst with twisted pedicle	1
Ovarian cyst, bilateral	2
Ovarian cyst, unilateral	22
Ovarian cyst, suppurating	1
Bilateral dermoid cyst, umbilical hernia	1
Dermoid cyst, suppurating, sinus through abdominal wall	1
Dermoid cyst with twisted pedicle	1
Dermoid cyst	1
Intraligamentous development of fibroid	18
Retroversion of uterus	4
Procidentia of uterus	4
Parovarian cyst	2
Ectopic pregnancy	3
Papillary carcinoma of both ovaries	1
Abscess of ovary	1
Pyosalpinx, bilateral	7
Pyosalpinx, unilateral	4
Salpingitis, bilateral	2
Salpingitis, unilateral	8
Myxomatous degeneration of tumor	8
Cystic degeneration of tumor	6
Necrosis of tumor	17
Twisted pedicle, pedunculated tumor	2
Epitheliomatous infiltration of fibroid tumor	1
Adenocarcinoma of body of the uterus	4
Epithelioma of cervix uteri	4
Sarcoma	2
Synchytioma	1

Careful observation has dispelled the classical teaching that fibroid uterine tumors disappear after the menopause. The error was doubtless based on observations of small growths, and on the discontinuance of menstrual excesses. Among the writer's cases are several instances of large tumors which had their most active growth after the menopause. In one notable case a woman at fifty-two was reduced to an extreme condition, bed-ridden and emaciated, with a large uterine fibroid that gave little trouble previous to the menopause. The operation disclosed an immense interstitial fibroid undergoing extensive necrosis in its interior.

The early operations upon fibroid tumors were done in cases where the tumor was mistaken for an ovarian cyst. Burnham, of Lowell, Mass., operated in this way in 1853. Gilman Kimball, of the same town, deliberately operated for a fibroma two months later, imitating McDowell's method of treating the pedicle in ovariectomy. The pedicle (cervix uteri) was transfixed and ligatured with silk, dropped into the pelvis, and the ligatures brought out at the lower angle of the abdominal incision. This patient recovered, and Dr. Kimball operated eleven times with six recoveries, results now which would scarcely maintain any operation in favor and usage.

Sir Spencer Wells, of England, and the Atlees, in America, while dealing for the most part with ovarian tumors, endeavored to treat uterine fibroids along the same lines. Washington L. Atlee did myomectomy by preference and occasionally did hysteromyomectomy. The operative treatment of uterine fibromata, however, had no established place in surgery during this period, and on account of sepsis and hemorrhage from the pedicle the mortality was too great to secure popular adoption. The first systematic operative procedure was devised and established by Koeberle, of Strassburg, who invented the *serre-neude*. This eminent surgeon practised the median abdominal incision, and after delivering the tumor incised and stripped away the peritoneum so as to release the bladder in front, and applied the *serre-neude* to the pedicle; cut the tumor away; fixed the stump in the lower angle of the incision; passed pins above the *serre-neude* through the stump so as to retain the same in place; brought the peritoneal surfaces together below the *neude* so as to shut off the peritoneum, and closed the abdominal incision above and around the pedicle. In the skilful hands of Thomas Keith, of Edinburgh, this operation obtained a high position, and after Lister's great discoveries were adopted in surgical practice, this method was followed by Keith in Edinburgh, Tait in Birmingham, Bantock and Thornton in London, Koeberle in Strassburg, and Price in America, with admirable results.

The essential point in hysteromyomectomy from the first related to the treatment of the pedicle. The extraperitoneal treatment of the pedicle with Koeberle's *neude* was a great advance over all attempts to drop the pedicle after securing it with any kind of ligature. The elastic and contractile tissues of the cervix uteri composing the pedicle were prone to slip from the ligature, and hemorrhage was a common cause of death after operation. The open cervical canal and exposed stump were frequently the infecting focus of septic peritonitis.

Bardeheuer instituted the procedure known as pan-hysterectomy, whereby the cervix was completely excised after securing all communicating vessels. This operation was first practised in America in 1888 by Dr. M. A. D. Jones, and has been popularised in France by Doyen, in Germany by August Martin, in England by Christopher Martin, and remains the operation of choice with a number of American operators.

A revolution was wrought in hysteromyomectomy by Dr. L. A. Stimson, of New York, who proposed and practised the ligation of the ovarian and uterine arteries upon each side as the first step in dealing with the tumor. By this simple but essential procedure hemorrhage is controlled without mass ligatures and

quickly. From this time the supravaginal amputation with post-peritoneal pedicle increased in favor, and is now the popular established method of doing hysteromyomectomy in the treatment of uterine fibromata. After securing the trunks of the ovarian and uterine arteries on each side, the peritoneum is incised upon the anterior and posterior surfaces of the tumor and stripped away, releasing the bladder in front and making an anterior and posterior flap of peritoneum. The broad ligaments are now divided on each side, the tumor cut away by amputating the cervix low down, the cervix stitched across with absorbable sutures so as to secure small anastomatic vessels, the peritoneal flaps brought together with absorbable sutures across the floor of the pelvis so as to leave the pedicle beneath, thus placing the pedicle outside the peritoneum. The advantages of this procedure consist in ease of execution, brevity of operation, safety of ureters, and the protection afforded against sepsis by complete closure. Indeed the results from this operation are so near perfect as to make the operation equal to that of ovariectomy. The operation is superior to the Koeberle method of extraperitoneal pedicle in that no sloughing stump in the abdominal incision obtains, with the inevitable tendency to ventral hernia at the site of the pedicle. It is superior to pan-hysterectomy in the ease of its execution and the diminished time required.

In 1872, Hegar proposed and practised the removal of the uterine appendages (ovaries and Fallopian tubes) to establish premature menopause and thereby secure atrophy of the fibroid growth. This operation received the sanction of Mr. Lawson Tait, and his great authority secured for it general adoption. It was only a compromise; in some instances on account of the distorted relations of the appendages caused by the growth it was impracticable, and in many instances it failed to secure the desired results. Another procedure practised by some surgeons consisted in ligating the uterine arteries with a view to securing atrophy of the growth, but with unsatisfactory results. The operation already described as supravaginal amputation with extraperitoneal (but intrapelvic) pedicle has yielded such splendid results, that the operation of Hegar and that of ligature of the vessels have been generally discarded.

The operation of myomectomy, by which one or more sub-peritoneal and interstitial fibroid tumors may be excised and the uterus preserved, has a definite and positive value in the treatment of a certain class of uterine fibromata. In my opinion the efforts of some surgeons toward conservatism in the application of this procedure have gone too far. The great object of every operation is the cure of the patient, maintaining the preservation

of all organs and structures compatible with this great purpose. Myomectomy is applicable to subserous tumors whenever single and pedunculated; to multiple sessile and interstitial tumors within certain limits, but judgment should be used in restricting the operation to appropriate cases.

1912 SIXTH STREET.

ABSTRACTS.

Sublamine as a Conjunctival Disinfectant.

By DR. JOSEF IMRE, at Hódmezővásárhely, Austria,
Physician-in-chief to the Elizabeth Ophthalmological Hospital.

[From *Die Heilkunde*, September, 1903.]

IN conjunctivitis attended with copious secretion we need an antiseptic which is as energetic as corrosive chloride and as harmless as boric acid. Such a one is sublamine, which I have used in the hospital for the past year. Sublamine, the ethylene-diamine-sulphate of mercury, has already proved superior to bi-chloride for hand disinfection. It does not irritate the skin, may be employed as strong as is desired, has a deeper action than sublimate and possesses other advantages. I use it for the treatment of conjunctivitis, for preparing the field of operation on the eye, cleansing the lachrymal sac, and for similar purposes.

Sublamine is most valuable in the various forms of suppurative conjunctivitis. In these cases everything depends upon irrigation and the frequent removal of accumulated secretions. The earlier this is begun the better of course it is; but even when begun only late it is essential to prevent the stagnation of the noxious substances in the sac. In acute cases with abundant suppuration, as in gonorrhoeal conjunctivitis, sublamine 1-1000 answers admirably, being readily borne. Instillations are made from a large eye glass onto the everted lid; where this cannot be done the lids are opened with the fingers or spoons. Treatment is kept up day and night, 1½ to 3 ounces being used every half hour and occasionally oftener to obviate pus stagnation; but experience has taught me that too frequent irrigation no matter with what causes the formation of pseudomembranes.

In numerous cases of blenorrhoea neonatorum sublamine did us the greatest service. Treatment in the newborn is comparatively easy, especially in the less virulent forms and those that come under treatment early. But the eyes of children which cannot be seen daily are in great danger. In these cases the

attendant is instructed thoroughly how the sublamine irrigations are to be performed and for the first few days the patient is seen every day. When I am convinced that treatment is carefully carried out and the cornea is unhurt, the patient comes only twice a week. Of course in severe cases the pencillings with silver nitrate cannot be omitted.

In our hospital each trachoma patient gets, in addition to abundant saline irrigations twice daily, a bottle of 1-2000 sublamine together with cotton and a pus basin, so that he can wash his eyes as often as is necessary. We formerly used boric acid; but since we give sublamine and the assistant physician or the nurse cleanses the conjunctiva with it before morning and afternoon rounds, even freely secreting, verrucous, plicated and thickened conjunctiva clear up and are cured decidedly faster. The conjunctiva does not stand effective concentrations of corrosive sublimate, but patients never complain of sublamine. In other severe infections, conjunctivitis and generally in all cases of fresh catarrh, sublamine compresses and irrigations are more effective than boric acid irrigations and lead or zinc. The secretion disappears more rapidly and the conjunctiva thins quicker. Painting with a weak silver nitrate solution, or better with argentamine, must not be omitted; otherwise the later stages of the disease, when the violent irritative symptoms have disappeared, may be much protracted.

Adrenalin in General Surgery.

HARRY GIDNEY, F. R. C. S. (Edin), (*Indiana Med. Gazette*, October, 1903,) finds the clinical usefulness of adrenalin is very great and extensive, and owing to its power of rapidly and effectively producing vasomotor constriction, it is adapted to the treatment of almost all inflammatory conditions. The drug is also of extreme value in arresting hemorrhage during surgical operations. It is indicated whenever and wherever any local hyperemia exists, more especially in inflammations of mucous surfaces such as those of the eye, throat, larynx, pharynx, urethra, bladder, nose, rectum, vagina, uterus, stomach, and the like. It is used not only to stay hemorrhage when it exists, but also as a preventive or controlling remedy, given either internally or externally prior to an operation, so as to lessen the amount of bleeding during operation procedures. It is nonirritant to mucous membranes unless used too frequently and in excess.

On reading the literature on the subject, says the writer, I find that adrenalin is admitted to be the most powerful and rapid cardiac stimulant and tonic we have, being chiefly used in car-

diac affections, hematemesis, hemoptysis, hemophilia, hematuria, menorrhagia, post-partum hemorrhage, purpura, scurvy, and in similar conditions. It is said to be the most rapid restorative in chloroform and other forms of anesthetic syncope, and in such cases it is advisable to administer it intravenously. The author reports the results of several operations, major and minor, in which adrenalin was employed. The first case was one of fracture of the vertex of the skull. As one of the larger branches of the middle meningeal artery had been torn there was profuse dural hemorrhage and capillary oozing which were controlled by the use of the 1-1000 solution. In the second case, one of hemorrhoids, profuse bleeding was checked by the rectal insertion of a plug of cotton wool, soaked with adrenalin chloride solution.

The third case was one of skin grafting in which the author tried pressure to stop the capillary bleeding. As the procedure was somewhat tedious he applied adrenalin chloride solution with almost immediate cessation of all oozing, and what is usually a lengthy and sanguinary operation was converted into a short comparatively bloodless one. The fourth case, one of hemorrhage after the extraction of teeth, and the fifth, which appears to embrace the author's experience in a number of cases of epistaxis, afforded additional opportunity to test the hemostatic effect of adrenalin. In the sixth case a post-partum hemorrhage was checked by swabbing the uterine cavity with adrenalin solution, while the same happy result was obtained in a case of secondary hemorrhage following an operation for the relief of a mammary abscess.

Gidney has found that the instillation of a 1-5000 to 1-2000 solution of this drug reduces the inflammation and considerably cuts short the process of conjunctivitis. He usually applies it (diluted) over the inflamed parts by means of a soft camel's hair brush. He always uses the preparation containing chloretone, which has a decided local anesthetic action, relieving much of the photophobia and pain. He is fully convinced of the power of adrenalin to arrest or lessen the bleeding that arises from the cut ends of the iris after iridectomy. He speaks highly of its efficiency in chemosis, cataract operations, evisceration of the eyeball, operations for ectropion, symblepharon and trachomatous pannus.

The author concludes that in all cases of minor surgery in which it is desired to arrest bleeding from any cut or exposed surface we have in adrenalin a most useful, powerful and rapid drug,—one that is not poisonous, nonirritant and not accumulative in action, especially in operations upon the conjunctiva and eyelids.

NOTE.—Credit for this abstract should read INDIAN, instead of Indiana Med. Gazette.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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No. 6.

An Antivivisectionist Libel.

THE antivivisectionists in Great Britain have received a severe reprimand in the law courts,—one it would be well for similar people in our own country to heed. It appears that Mr. Stephen Coleridge,—we omit the rest of his name for the sake of brevity,—a member of the bar, son of the late Lord Chief Justice Coleridge, and an honorary secretary of the Antivivisection Society, had charged Dr. Bayliss, assistant professor of physiology at University College, London, in effect with the ruthless torture and torment of animals upon which he had performed experiments in the course of his instructions to students.

According to the pleadings of counsel Mr. Coleridge prepared a bomb that he fired at the meeting of the Antivivisection Society, at Saint James's Hall, May 1, 1903, and took good care to have a reporter present who published his version in the *Daily News* the next morning. Mr. Coleridge admitted that he had made the statement which the plaintiff complained of, and also his responsibility for what appeared in the *Daily News*, May 2, 1903.

The trial of this action was commenced November 11, 1903, before Lord Chief Justice Alverstone and a special jury. As might be expected the parties to the suit, plaintiff and defendant, were represented by the ablest of counsel, and great general interest attached to the trial which lasted four days. It was specially reported for the *British Medical Journal*, and is printed in its issues for November 14 and 21, 1903, from which we condense this outline. It was shown on the trial that Dr. Bayliss was duly licensed under the law to perform vivisections before his class of students, holding the home secretary's certificate to that effect. The penalty for the first violation of the law by a licensee is \$250, and for the second offense is \$500. A number

of witnesses were examined on both sides, including both plaintiff and defendant, each of whom were questioned in much detail.

The Lord Chief Justice charged the jury that the animal experimented upon must have been under full anesthesia from the beginning to the end of all operative experiments, else the law was violated; that the defendant must establish the fact that such had not been the case in the present instance; otherwise the plaintiff could recover. In other words, the defendant was not entitled to leave the matter in doubt. He further charged it was clearly to be borne in mind that as between comments and criticism on the one hand and allegations of fact on the other, it was one thing to comment upon or criticise with severity, and another to assert that a man had been guilty of particular acts of misconduct. He still further, in concluding his charge, said it was impossible to consider the case a light one and affirmed it was self-evident that Mr. Coleridge was entitled to comment in the strongest possible way, but that a person who undertook to advocate a cause was not entitled to do so by charging other people with criminal offenses unless he was able to substantiate such charges. The Lord Chief Justice's final postulate was that no man had any right to import into the public discussion of public questions slanderous defamation of any other man, unless he was prepared to prove those charges in a court of justice.

We have given the salient features of the summing up by the learned Lord Chief Justice, but have done imperfect justice to his charge. It is in its completed phraseology a clear exposition of the law of libel, according to the statutes of Great Britain. At the conclusion of the charge the jury retired and, after an absence of twenty-five minutes, returned into court with a unanimous verdict for the plaintiff, assessing the damages at £2,000, or about \$10,000, together with the costs of the special jury. The verdict was received by the public assembled in the courtroom with demonstrations of satisfaction.

The *British Medical Journal* of November 21, 1903, in commenting editorially on the trial, concludes as follows:

Here was a test case of the utmost gravity, eye-witnesses, sworn statements, masses of evidences, and a great array of witnesses, to end in absolute defeat, for this one and only reason, that the other side told the truth. We offer to Dr. Bayliss, Professor Starling, Sir Victor Horsley, and all the witnesses on that side, not only our congratulations, but also our heartiest thanks. *Bene meruerunt de republicâ.* They have done their duty by their profession, and have done it well. For their reward, they know that they have taught everybody to doubt the argument and the literature that are the stock-in-trade of these

antivivisection societies. The arguments, alas, will go on, and so will the literature. But, henceforth, the sting is gone out of the angry abusive language, and the catchword "torture" will be taken for what it is worth. The recent trial has shown once more that these societies are not to be trusted. The chief of them, the society that held its head highest and had the proudest list of titled supporters, has been put to the test in the person of its chief representative, and the result of that test can hardly be misunderstood.

THE epidemic of typhoid fever at Butler, Pa., has assumed startling proportions, and before it is stamped out will undoubtedly become the most formidable of its kind that the world has yet seen. In a population, aggregating about 15,000, there were reported up to December 14, 1,247 cases, with 51 deaths. Dr. George A. Soper, a sanitary expert employed to investigate the causes of the epidemic, thinks that it has as yet, by no means, reached its culmination, 50 per cent. of the cases not having arrived at the critical stage. He attributes it, in large part at least, to the suspension of the mechanical filtration of the city water supply. Unfiltered water from Conquonessing Creek was supplied from October 26 to November 2, the epidemic beginning November 5, 1903. Dr. Soper states that investigation of the drainage areas showed the existence of numerous sources of pollution and particularly the occurrence of cases of typhoid on the banks of the Conquonessing since July.

It will be remembered that a similar epidemic occurred at Plymouth, a mining town near Wilkesbarre, Pa., in 1885, which was appalling in its devastation, over 1,100 cases having developed in a population of 8,000. Last year at Ithaca an outbreak of the disease among a population similar in size to Butler, caused about 900 cases of typhoid fever. And yet the disease in question belongs to the preventable class! A grave responsibility rests upon public health officials everywhere throughout the land. Their inefficiency is at once demonstrated wherever such an outbreak occurs.

APATHY regarding the value of research in the domain of medical science is one of the regretful features of the American temperament, individual and governmental. It is quite true that a number of wealthy men, of which Mr. Rockefeller and Mr. Carnegie may be mentioned as a type, have given liberally for the establishment and endowment of research laboratories. But these instances are exceptional. The great mass of our people pay little heed to this important topic and the government does almost nothing, comparatively speaking, to foster it.

We are led to these observations from the remarks made by Dr. Roswell Park at the Liberal Club dinner, December 18, 1903, during the course of which he reminded his audience that the city of Buffalo has a university with nearly a thousand students in attendance; that in its several departments it has done admirable work for many years, in proof of which he pointed to the fact that hundreds of its graduates have won distinction in divers ways; and yet, he affirmed, it has never had financial support from the city. It has a laboratory of research, he continued, that is engaged in a field of great concern to the health of humanity,—a cancer laboratory that not only fails to receive support from the city itself, but is compelled every winter to put up a desperate fight in the legislature for the comparatively trifling sum appropriated by the state for its maintenance.

"We need an awakening," said Dr. Park, "in our own city to the value of research, its marvelous benefit to the public, and also to its costliness and the great difficulty under which it is carried on."

This is a fact that cannot be denied, and it would seem high time for our citizens to arouse themselves from the lethargy that appears to have overcome them in this respect.

A JOINT committee representing the American Medical and American Pharmaceutical Associations has been appointed to investigate the desirability of establishing a National Bureau of Medicines and Foods. The committee requests publication of this fact and also that opinions, criticisms and suggestions on the subject be forwarded to the committee, the personnel of which is as follows: on the part of the American Medical Association, E. Eliot Harris, New York; N. S. Davis, Jr., Chicago; Solomon Solis Cohen, Philadelphia; H. Bert. Ellis, Los Angeles; Philip Mills Jones, San Francisco; on the part of the American Pharmaceutical Association, H. H. Rusby, New York; Jas. M. Good, Saint Louis; C. S. N. Hallberg, Chicago; A. B. Lyons, Detroit; S. A. D. Sheppard, Boston. Chairman, joint committee, H. H. Rusby; secretary, Philip Mills Jones.

EXPLANATION.—The paper by Dr. D. W. Cathell, entitled, Was it wise for the American Medical Association to change its code of ethics? was read at the meeting of the Medical and Chirurgical Faculty of the State of Maryland, September 24, 1903, and was printed in American Medicine, October 17, 1903. The author's reprint used for "copy" was made to state these facts, but the printer of this journal failed to use them, which we regret.

PERSONAL.

DR. EDWARD F. BRUSH, of Mount Vernon, N. Y., was elected mayor of that city at the general election held in November, 1903. He has held before the same office and during his term of service rescued the city from threatened bankruptcy. It is stated that a similar opportunity presents itself to him at the threshold of his present term. Dr. Brush is well known as one of the most prominent physicians in the Westchester district.

DR. EUGENE BEACH, of Gloversville, was elected mayor of that city, November 3, 1903. Dr. Beach is also a state medical examiner, but has never before held political office. He will have an opportunity to institute needed reforms during his term of office.

DR. WILLIS F. WESTMORELAND, of Atlanta, has been appointed president of the Georgia state board of health, a body created by recent legislative enactment. Dr. Westmoreland will, therefore, have ample opportunity for the exercise of his well-known executive ability in establishing sanitary regulations throughout his native state.

DR. GEORGE H. WESTINGHOUSE, of Buffalo, has been appointed district physician, vice Eugene C. Waldruff, removed. Dr. Westinghouse will exchange districts with Dr. De Groat, for the sake of convenience. The appointment of Dr. Westinghouse cannot fail to strengthen the hands of the Commissioner of Health, as he thereby secures a distinct and creditable addition to his staff.

DR. CHARLES H. B. MEADE, formerly of Buffalo, has been appointed surgeon in the Cunard steamship service. He sailed from New York on the Carpathia, November 24, 1903, for a cruise in the Mediterranean.

DR. ROSWELL PARK, of Buffalo, delivered an address Friday evening, November 27, 1903, before the Buffalo Society of Natural Science, choosing for his subject, Radium and radioactive substances.

DR. WILLIAM C. KRAUSS, of Buffalo, addressed the Society of Natural Sciences, Friday evening, December 11, 1903, on the Height and weight of normal and abnormal individuals.

DR. CHARLES HAASE, a graduate of the University of Buffalo, 1902, and who afterward served a term as interne at the Sisters of Charity Hospital, which he completed November 1, 1903, has located at 17 Walden Avenue, corner of Genesee Street, Buffalo. Hours: 8 to 9 a. m.; 12 to 2 and 6 to 8 p. m. Telephone, Howard 2543.

DR. RAY H. JOHNSON, of Buffalo, has removed his residence and home office to 449 Franklin Street. Hours: 1.30 to 2.30 p. m. He still retains a branch office at his former residence, corner of North Division and Chestnut Streets. Hours: 12 m. and 7 p. m. Telephones: Bell, Tupper 850; Frontier, 850. At branch office, Frontier, 26072.

DR. FREDERICK H. MILLENER, of Buffalo, addressed the Historical Society, November 22, 1903, on the history of the telephone.

DR. H. G. MATZINGER, of Buffalo, lectured on artistic anatomy before the Art Students' League, December 16, 1903.

HON. T. GUILFORD SMITH, of Buffalo, a regent of the University of the State of New York, was elected a member of the executive committee of the board of regents for 1904, at the annual meeting of that body held in December. Regent Smith was also appointed a member of the committees on finance and museum, being chairman of the former committee.

REV. ARTHUR E. MANN, son of Dr. Matthew D. Mann, of Buffalo, who was ordained recently by Bishop Walker of the diocese of Western New York, has been appointed a teacher in St. John's College, Shanghai, China. Mr. Mann sailed for his new post of duty December 28, 1903.

OBITUARY.

DR. HORACE M. PAINE, formerly of Albany, died at the home of his son at Atlanta, Ga., December 6, 1903, aged 76 years. He graduated from the medical department of the University of the City of New York in 1849, and became one of the most respected homeopathic physicians in this country. Dr. Paine was an early and ardent advocate of state examination for license and did much to bring about this reform. His remains were taken to Albany for burial.

DR. EDWARD A. MILLRING, formerly of Buffalo, died at Stockton, N. Y., December 19, 1903, in the thirty-fifth year of his age. He graduated in medicine from Niagara University in 1890, and practised in Buffalo until about two years ago, when he removed to Stockton. He was the youngest son of William S. Millring of this city.

DR. WILLIAM H. JACKSON, of Springville, N. Y., died at his home November 28, 1903, aged 62 years. It is reported that Dr. Jackson's health had been impaired for some time, but that pneumonia was the immediate cause of his death. He was born at Clarkson, N. Y., August 26, 1841, received his preliminary education at the Albany State Normal School and took his doctorate degree from the University of South Carolina at Columbia in 1873. Dr. Jackson occupied a position of prominence not only in his profession but in the community where he lived. He was a member of various medical societies and of masonic and other orders. In 1863 Dr. Jackson married Miss Mary Hyde. Her death occurred in 1870. In 1877 Dr. Jackson married Frances Rockwell. From the first union three children survive, Mrs. C. R. Shuttleworth, of Buffalo; Dr. W. H. Jackson, of Galetton, Pa., and Lucian P. Jackson, of Warren, Pa. Besides his widow, two sons, by the last marriage, also survive. They are Fletcher R., and Lawrence C. Jackson.

DR. FRANCIS W. HIGGINS, of Cortland, N. Y., dropped dead in his office December 18, 1903, aged 46 years. He graduated in medicine from the medical department of New York University in 1881. Dr. Higgins was a prominent physician in his region of the State and was a member of several medical societies. He attended the last meeting of the Medical Association of Central New York, where he read a paper which appears in this issue of the JOURNAL. His sudden death in the prime of life is lamented by professional colleagues, friends and patients.

DR. HORACE C. TAYLOR, of Brocton, N. Y., died at his home, December 21, 1903, aged 90 years. He was among the oldest and best-known physicians of Chautauqua County.

DR. CYRUS EDSON, of New York, died of pneumonia, December 2, 1903, at Roosevelt Hospital, after a short illness, aged 46 years. He was health commissioner during a portion of the administrations of Mayor Gilroy and Mayor Strong. He worked out important problems in the health department and acquired a large practice after his retirement from office.

DR. A. P. WAID, of Buffalo, a graduate of the medical department, U. of B., 1874, died at his home, December 21, 1903, aged 70 years. The remains were taken to Spartansburg, Pa., for burial.

WILLIAM MATTHEW WARREN, of Detroit, business manager for the house of Parke, Davis & Company, died November 11, 1903, aged 39 years. He entered the service of the firm at the age of 17 years, served in the various grades until at thirty-two he became general manager. He was a man of rare gifts and attached himself strongly to his employers and subordinates. The directors of the company adopted a touchingly tender memorial and have sent it out in appropriate form.

Mr. Warren was the publisher of the several medical journals in which Parke, Davis & Company are interested,—*Medicine*, *The Medical Age* and the *Therapeutic Gazette*.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the months of November and December, 1903, as follows:

Section on Obstetrics.—Tuesday evening, November 24. Program: Shall the ovaries be removed when operating for double pyosalpinx? C. C. Frederick; discussion opened by M. A. Crockett.

Postponed.—The regular meeting of this section, which should, according to the program of session, have been held Tuesday evening, December 22, was postponed.

Section on Surgery.—Tuesday evening, December 1. Program: Secondary syphilis and its diagnosis, Alfred E. Diehl; The use of invisible light rays in medicine and surgery, Frederick H. Millener; discussion opened by Roswell Park.

Section on Medicine.—Tuesday evening, December 8. Program: The diagnosis of diseases of the heart muscle, John Parmenter; the discussion led by Henry R. Hopkins; In memoriam of Dr. C. C. Wyckoff, Roswell Park, D. W. Harrington; De Lancey Rochester, memorial committee.

Section on Pathology.—Tuesday evening, December 15. Program: Rapid sterilisation in the flame, Marshall Clinton; A case showing trichocephalus dispar, Irving P. Lyon; Diagnosis of typhoid and colon bacilli with neutral red, George Roberts; An unusual case of amyloid degeneration, N. G. Russell.

THE Medical Society of the County of Erie will hold its eighty-third annual meeting Tuesday, January 12, 1904, under the presidency of Dr. Ernest Wende, of Buffalo. The program in preparation by the secretary, Dr. F. C. Gram, will soon be issued. All physicians are cordially invited.

THE Erie County Medical Association held its quarterly meeting at the University Club, December 7, 1903, under the presidency of Dr. Allen A. Jones, of Buffalo. Dr. A. H. Briggs, of Buffalo, read a paper entitled, A consideration of different methods of conveying the infection of typhoid fever. Dr. Prescott Le Breton, also of Buffalo, presented the report of A case of Potts's Disease, limited to the atlas and axis. A memorial of Dr. William H. Jackson, of Springville, was presented through a committee consisting of Drs. Charles G. Stockton, A. A. Hubbell and A. G. Bennett. Officers were nominated to be voted at the next meeting, as follows: president, C. C. Frederick; vice-president, A. G. Bennett; secretary, D. E. Wheeler; treasurer, Adolph H. Urban.

COLLEGE AND HOSPITAL NOTES.

IT is announced that the Lackawanna Steel Company will erect a hospital and morgue at Stony Point for the treatment of the maimed and for the reception of the bodies of those killed in the service of the company. At present those injured are taken to the Buffalo General Hospital, which is regarded as inconvenient. The cost of the new structure, which will be built of wood, is expected to aggregate about \$12,000, and it will be three stories in height.

THE Buffalo State Hospital has issued its thirty-second annual report, covering the year ending September 30, 1902. This is in reality the superintendent's report, as the board of managers was wiped out by legislative enactment last year. Dr. Hurd has done himself and the cause which he serves distinguished credit in his management of this great institution. He is surrounded by an able staff and the whole working of the state hospital is a matter of pride to the citizens of Buffalo. This report contains an obituary notice of Dr. Thomas Lothrop, who served on the board of managers for ten years. When the board was abolished a board of visitation was created to which Dr. Lothrop was appointed. Upon his death Dr. William C. Krauss was designated to fill the vacancy. The total number of patients treated during

the fiscal year was 2,296, of which 1,059 were men and 1,237 were women. The population of the hospital has steadily increased year by year until the limit of its capacity is practically reached. It, therefore, will become necessary for the state to consider the propriety of a further enlargement of the institution.

THE Riverside Accident Hospital was recently transferred from the Fitch Institute to more commodious quarters, at 118 Swan street, Buffalo, where it is installed in a three-story brick building, more accessible and better adapted to its needs.

DR. T. D. CROTHERS, of Hartford, professor of mental and nervous diseases at the New York School of Clinical Medicine, will deliver a course of four lectures on Inebriety from alcohol, opium and other narcotics, January 5 and 6, 1904, at 4 p. m. and 8 p. m., at the school, 328 West Forty-second street. The public are cordially invited to attend.

A NEW hospital is projected at Bradford, Pa., to be built on a hillside, constructed of stone and brick, and will have the most approved equipment. The plans were drawn by Green & Wicks, the Buffalo architects, and the chairman of the building committee is Dr. James Johnston, of Bradford.

BOOK REVIEWS.

A TEXTBOOK OF OPERATIVE SURGERY. Covering the Surgical Anatomy and Operative Technic Involved in the Operations of General Surgery. Written for Students and Practitioners. By WARREN STONE BICKHAM, Phar. M., M. D., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York. Octavo, 984 pages, 559 illustrations, entirely original. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$6.00 net; sheep or half morocco, \$7.00 net.)

To affirm with truthfulness that another treatise on surgery were necessary to the proper understanding of the art might be a somewhat difficult proposition to maintain. On the other hand, one need only glance at some of the features of the one under consideration to determine its usefulness and to be convinced that the art of surgery has been advanced in detail and concrete by its publication.

The author's aim is to lay stress upon surgical anatomy, as related to operative technic and, according to his own foreword, the work is planned to present to the student and practitioner the best technic of modern surgeons in the operations he describes.

He divides his book into two parts, the first dealing with the operations of general surgery, and the second with those of special surgery. He has arranged the consideration of each subject in a very practical manner, giving landmarks, instruments used, description of the operation, preparation and position of the patient, position of the surgeon and his assistants,—these and many other suggestions of importance are presented with each operation. Bickham places great importance very properly upon the incision itself, and gives it a separate heading in each instance. His reason is that the operator who begins an operation correctly has a decided advantage over one who commits an error at the outset.

The table of contents attracts attention from the fact that to each chapter is given a synopsis of its subject-matter,—a plan that will facilitate reference. To give an example, chapter one relates to operations upon arteries, and three quarters of a page is devoted to the synopsis of its contents. If, therefore, one wishes to see a description of the ligation of the lower third of the anterior tibial artery he will find it on page 105. The descriptions of all operations are concise with scarcely a superfluous word, and the author's methods of dealing with almost every subject are original. It must be confessed, however, that sometimes his conciseness is secured at the expense of elegance in diction, even though it has enabled him to compress much valuable material into narrow space. When a description involves the repetition of anatomical topography or other topics, reference is made to the page where such description may be found, instead of rewriting the material.

The latest operations are given with clearness and the best technic for their execution is described. We may cite Bickham's chapters on brain surgery and on the pancreas as instances of excellent detail and as examples of the very best modern scientific surgical instruction. The book abounds with evidence of thoughtful, studious work, is arranged in a manner that appeals to both student and practising surgeon, and will prove of great value to him who must perforce practise surgery as well as medicine, and for which he must equip himself with literature which meets his necessities. Moreover, it will be needed by every teacher and instructor in surgery of whatever grade.

The illustrations are remarkable exhibitions of artistic accuracy. So far as we know, this is the first surgical treatise to put out 559 illustrations that are practically original drawings. Those not entirely so, of which there are but few, have been modified by the author and redrawn under his direction, hence, they too, become substantially original in character. We cannot refrain from bestowing a word of personal praise on the artist who has done all this superb work. Fortunate, indeed, is the author in securing the services of so skilful and conscientious an artist as Miss Fry, who seems to possess a knowledge both of anatomy

and surgery, and, therefore, not only knows what she is doing but why she is doing it. Finally, the author has given more complete explanation of each particular picture than usual, which enhances their value more than four-fold.

THE PRACTICE OF OBSTETRICS. Designed for the use of Students and Practitioners of Medicine. By J. CLIFTON EDGAR, Professor of Obstetrics and Clinical Midwifery in the Cornell University Medical College; Attending Obstetrician to the New York Maternity Hospital. Royal octavo, pages 1111, with 1221 illustrations, many of which are printed in colors. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, cloth \$6.00; sheep or half morocco, \$7.00.)

In taking up a new treatise on obstetrics for review one can scarcely avoid the mental interrogatory,—“Of what need is there of another?” It must be confessed, too, that this is a pertinent inquiry, since a number of excellent works on obstetrics have appeared within the last few years, for it would seem upon examining them, as if the last word had been said already, for the present at least, on this branch of medical science. But even an imperfect inspection of Edgar's book is sufficient to convince that it contains features of the practice of obstetrics presented in new form, and in such a manner as to attract the attention, as well as fix in the mind the material offered.

The arrangement of the work is such as to appeal alike to the student and to the obstetrician who would refer to it for information in emergencies. There are ten parts placed in the following order: (1) physiology of the female genital organs; (2) physiological pregnancy; (3) pathological pregnancy; (4) physiological labor; (5) pathological labor; (6) physiological puerperium; (7) pathological puerperium; (8) physiology of the newly born; (9) pathology of the newly born; (10) obstetric surgery. This is a logical subdivision of obstetrics, and commends itself even to a tyro, progressing from the simple beginning to the heroic ending, fittingly reserving obstetric surgery until the last. The diagnosis of pregnancy, a subsection of the second part, is a fine piece of instruction and betrays the thoughtful and experienced teacher. Edgar summons all the known methods and arranges them in the order of sequence; and in differential diagnosis it is difficult to see how one could be better armed to meet what is sometimes the most difficult of problems to solve. Again, in the examination of pregnancy, the author has presented much valuable material in the clearest fashion possible, and which will impress the novitiate with the importance of thoroughness. Asepsis is here unfolded and discoursed upon most admirably, the use of rubber gloves being insisted upon as a means to prevent infection.

The description in detail of physiological labor is not excelled in any treatise, and in some respects we think it has never been equaled. This is a topic with which every student should become familiar and he can find no better exposition of it than in this

book. Pathological labor is another section in which the author displays great familiarity with his subject and presents it with equally great clearness. Scarcely a complication of labor, even though of the lesser importance, is omitted and the entire field is surveyed with more than ordinary perspicuity. We have never observed a better handling of dystocia in all its details. Edgar divides fever during the puerperium into the septic and nonseptic varieties. It is interesting to note the ingenious methods with which he deals with the last named form of fever. Rarely has this topic received such able treatment.

We have only here and there touched upon some of the excellencies of this work; it must be examined with care to be appreciated and it may be studied by experienced obstetricians with great profit. It is superbly illustrated, most of the pictures being original, some being redrawn modifications of other cuts or plates. Each of the ten principal parts is preceded by a complete synopsis of its contents and the entire construction of the book is beyond criticism. It will take its place among the best books of the year and is second to none as a scientific exposition of the present status of obstetrics.

ELECTROSTATIC MODES OF APPLICATION, THERAPEUTICS AND THE USES OF THE ROENTGEN RAY. By WILLIAM BENHAM SNOW, M. D., Professor of Electrotherapeutics and Radiotherapy in the New York School of Physical Therapeutics. Second edition revised and enlarged. Over one hundred illustrations, including ten full page half-tones. A. L. Chatterton & Co. New York. 1903. (Price, \$3.00.)

The initial portion of the book is technical. After a reference to the growing interest concerning electrostatic modes of application in many forms of disease, the author describes the various kinds of apparatus now before the public, and gives directions as to the care of the machines, especially during periods of humidity. This latter point he elaborates in an unusual degree.

The volume contains valuable hints, growing out of the experience of the writer, upon a subject that so perplexes the general practitioner. Physics constitutes a most important feature in the general principles of electrostatic administration, and due attention has been paid by the author to this branch of his subject. Information upon this point is strenuously demanded, since many physicians are today employing the system without anything like a proper knowledge of the principles underlying the inevitable effects of its practical use. There is a short chapter concerning *x*-ray apparatus, setting forth the respective merits of the static machine and the Rumkorff coil. It was a good thought to place in opposing columns their advantages and disadvantages. The preference of Dr. Snow for the static machine is too strongly emphasised, since the coil, too, has its splendid advantages.

The therapeutic application of the static machine is carefully discussed with special reference to passive hyperemia, sprains, all forms of nervous conditions and paralysis,—in fact, to a great

many diseases. There is no doubt in the author's mind that under certain conditions, a temporary relief is secured by the use of the static machine, although he certainly over-estimates its influence.

Snow also considers the different classes of disease in which this new method has been made the subject of experiment, and those in which its value has been actually demonstrated. There is no doubt that the *x*-ray has more effect superficially than upon deep-seated conditions. In spite of the great power of penetration it is not as likely to relieve these conditions as those merely cutaneous; nor is it infallible even there. If this is true, its power upon deep-seated disease is limited. There are, of course, diseases which have not been amenable to treatment and which still demand investigation. We can heartily commend the work, containing as it does a fair and reasonably full summary of the best upon a most important subject. The mechanical features of the book are commendable and the illustrations are fine.

G. W. W.

INFECTIOUS DISEASES. Their Etiology, Diagnosis and Treatment. By G. H. ROGER, Professor Extraordinary in the Faculty of Medicine of Paris, etc., translated by M. S. Gabriel, M. D., New York. In one octavo volume, of 864 pages, with 43 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$5.75 net.)

Knowledge of the infections and the diseases they cause is essential to the successful management of the majority of maladies that afflict the human race at the present time. Changes in the methods of practice have steadily followed the advances of the laboratory whenever the researches of the latter have explained the observations of the clinician. To arrive at an adequate understanding of the true meaning of the phenomena of infectious diseases, the laboratory worker and the clinical observer must act in concert; better still, if, as in Professor Roger, the opportunity and the ability for both lines of study are concentrated in one and the same person,—a rare gift.

In this work the rôle of pathogenic bacteria is considered in considerable detail, the microbic associations being an especially interesting chapter, while the defenses and reactions of the organism are developed in an unusual degree. Suppuration and gangrene are given considerable space, while septicemia and pyemia are exhaustively dealt with. After these comes the consideration of the nodular infections, in which is included tuberculosis; then cellular degenerations, and next general reactions in which the phenomena of fever are unfolded. The influence of infections upon the organism furnishes opportunity for extended dissertation of a most profitable character and of a most interesting nature. These four chapters merit the closest examination. Then we come to the evolution of infectious diseases, a chapter that is followed by one on the consequences of infection; these are fol-

lowed by chapters on the mechanism of immunity and of predisposition, congenital infections and heredity, the diagnosis and prognosis of infectious diseases, the therapeutics of infectious diseases and lastly, the prophylaxis and hygiene of infectious diseases.

From even this cursory view of the general scope and purpose of the work it will be observed that it is of great importance to every practising physician, that it is unlike any other treatise, and that it is a scientific exposition of the status of infectious diseases as understood at the present time. The author is not only perfectly familiar with this subject but he discourses upon it in a most interesting and instructive manner.

PHYSICAL DIAGNOSIS OF DISEASES OF THE CHEST. By RICHARD C. CABOT, M. D., Physician to out-patients, Massachusetts General Hospital. Small octavo, pages 335. One hundred and forty-seven illustrations. Second revised edition. New York: William Wood & Co. 1903. (Price, \$2.50.)

The development of knowledge relating to diseases of the chest began with the stethoscope. Austin Flint is quoted everywhere throughout the civilised world, as having contributed much toward the perfection of the test of auscultation and percussion and to the correct interpretation of the sounds elicited thereby. Cabot in the present work, has done much to further advance this method of diagnosis. He has contributed toward the further perfection of our means of examining the chest and of understanding what is heard in that mysterious cavity.

He has written a small treatise that covers the field as admirably, and we might add as completely, as most of the larger works. We have expressed our opinion heretofore (March, 1901, p. 618,) in these columns as to the quality of the material in Cabot's book, and we wish now to reaffirm our previously expressed praise of it. It is a work that will prove of great assistance to the student in his earlier studies and cannot fail to aid the practising physician in his clinical work. The author has made such revisions in this edition as seemed necessary to make it conform to the present state of knowledge relating to diseases of the chest.

FIRST PRINCIPLES OF OTOTOLOGY. A Textbook for Medical Students. By ALBERT H. BUCK, M. D. Clinical Professor of the Diseases of the Ear, College of Physicians and Surgeons, Medical Department of Columbia University, New York. Duodecimo, pages 227. Second edition. Illustrated. New York: William Wood & Company. 1903. (Price, \$1.50.)

The book before us is one of the few good ones that help to fill the gap between the treatise and the quiz-compend. It opens with a brief recitation of the methods of examination of the external, middle and internal ear, and then takes up the different structures in regular order,—auricle, external canal, middle ear and

mastoid process and internal ear. At the beginning of each subject is a short paragraph on anatomical considerations, evidently intended only to refresh the memory, the author assuming that the reader knows the anatomy; and this is followed by a few tersely worded generalities under the heading of pathology. The diseases described are the commonplace ones, that are familiar to every practitioner, and no space is wasted upon the unusual in any of its phrases. Although everything of importance is touched upon, brevity is one of the objects of the book, and is very well carried out.

The chapter on catarrhal middle ear affections, deals with the throat in its relation to these diseases, laying stress upon adenoid vegetations in the nasopharynx. Extradural abscess, infective thrombosis of the sigmoid sinuses and abscess of the brain are included in the chapter on mastoid disease, and the other chapters are equally comprehensive. A feature of the volume is the grouping together under one head of the pathological attractions of the membrana tympani and their significance. The book proper ends with diseases of the internal ear and auditory nerve, but there is an appendix in two sections devoted to the anatomy and physiology of the whole organ of hearing, the first section covering the middle ear and the second the labyrinth. Both are discussed rather exhaustively.

The book is very convenient in size (duodecimo) and teems with good points, which are set forth in clean-cut, vigorous English, abounds in simple facts, clearly stated, and is an altogether admirable work.

L. B., Jr.

A **DICTIONARY OF MEDICAL SCIENCE.** Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Bacteriology, Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence, Dentistry, Veterinary Science, etc. By **ROBLEY DUNGLISON, M. D., LL. D.**, late Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia. New (twenty-third) edition, thoroughly revised, with the pronunciation, accentuation and derivation of the terms, by **Thomas L. Stedman, A. M., M. D.**, Fellow of the New York Academy of Medicine. Imperial octavo, 1224 pages, 600 illustrations, with thumb-letter index. Philadelphia and New York: Lea Brothers & Co. 1903. (Cloth, \$8.00 net; leather, \$9.00 net; half morocco, \$9.50 net.)

The first edition of this dictionary was issued in 1839, and it has continued to occupy a prominent place in the libraries of every well-read physician since that time. Through frequent editions it has kept pace with changes and additions in the medical vocabulary until as now presented it is as near complete as any similar work of its size and scope. After the death of the learned author, the work was carried through several editions by his distinguished son, Dr. R. J. Dunglison, who numbered among other accomplishments that of being a lexicographer of the first

order. Upon his death, the publishers were compelled to choose another editor, and they have been fortunate in securing the services of Dr. Stedman in that capacity. He has done good service in the revision under consideration, and has made it a word-book that will take the front rank among medical dictionaries. It is of equal value to undergraduate and practitioner, to student of science and to literateurs everywhere, and in it is evidenced the fact that, no matter what progress is made in any department of medical science, Dunglison's medical dictionary is destined to keep pace with it and to continue in the future, as in the past, to be one of the best exponents of medical improvement.

THE STANDARD MEDICAL DIRECTORY OF NORTH AMERICA. 1903-4. Including a Directory of Practising Physicians in the United States of America, Canada, Cuba, Mexico and Central America. Lists of Practitioners of the Specialties and Alphabetical Index of all Physicians in North America. Also Directories of Medical Officers of the United States Army and Navy, Medical Societies, Medical Colleges, Medical Laws and Boards, Medical Publications (Books and Periodicals), Hospitals and Sanitariums, Mineral Springs, Drugs and Medicines, Medical and Surgical Products, Manufacturers and Life Insurance Companies. Chicago: G. P. Engelhard & Co. (Price, \$10.00.)

The title above given embraces an excellent synopsis of the contents of this valuable directory. First of all, it is an address-book of the physicians of the North American continent; then it is a guide to hospitals, sanitariums, colleges of medicine, medical societies, instrument makers, and book publishers; also it gives the medical laws of the several states, territories and countries. Its list of medical books and periodicals is a novel and useful part of the work. It is the first catalogue of medical publications that we have seen which approaches anywhere near perfection, and it can be consulted with confidence in its accuracy.

The book is well bound in red buckram, which is a point of importance. A poorly bound book is inconvenient to examine and soon becomes useless, especially one consulted so frequently as a directory. It is surprising that so much information can be collected from so many sources with so few errors, and we apprehend a great demand for this excellent work.

FUNCTIONAL DIAGNOSIS OF KIDNEY DISEASE. With especial reference to Renal Surgery. Clinical experimental investigations by Drs. Leopold Casper and Paul Friederich Richter, Berlin. Translated by Dr. ROBERT C. BRYAN, Richmond, Va., and HENRY L. SANFORD, Cleveland, O. Duodecimo, pages 233. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$1.50.)

The first thing which strikes even a casual observer on opening this book is its apparent completeness, and its value is increased by the reports of cases which it contains illustrative of the body of the work. Certainly there are no more expert workers in the renal field than Casper and Richter, and they have given the results of their research, their observations, and their deduc-

tions to the profession with all the detail which marks the literary efforts of the Germans. The translators have given the book a rather free rendering and have not marred it by attempting to add a great mass of personal opinion and American references. They have shown their wisdom in being content to translate the work of the eminent foreigners and give the words of Casper nearly as they were originally published. Moreover, in the translation nothing has been lost, the work being very complete. There is much space given to ureteral catheterisation, its difficulties, its advantages and its errors. The problems of diagnosis, the importance of functional diagnosis and its methods are fully described, as is the determination of urinary constituents. Cryoscopy is explained intelligently and in a manner simple and sensible. A large part of the book is given up to illustrative case reports and experimental results. The authors have not written against space, but have made every word count, which is another reason why they have given us such a valuable book. N. W. W.

DISEASES OF THE NOSE AND THROAT. By CHARLES HUNTOON KNIGHT, A. M., M. D., Professor of Laryngology, Cornell University Medical College. Octavo, 438 pages; 147 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$3.00.)

The volume described above is so uniformly written that no one part of it can be praised in preference to another. The author describes each disease and its treatment completely; states special facts concisely, and reviews the new theories with an unprejudiced pen. No better example of the concise and exhaustive manner in which he treats his subjects can be given, than his description of bony cysts of the middle turbinated body on the forty-fourth and succeeding pages. This book is thoroughly up to date and is especially planned for students as well as for general practitioners who wish to learn what is known on any subject pertaining to the specialty of diseases of the nose and throat. The reviewer has read the book with great pleasure and can think of nothing which could be added to make it more thoroughly complete. The illustrations are taken from recent sources and are of great assistance to a thorough understanding of the text.

W. S. R.

BLAKISTON'S QUIZ COMPENDS. A Compend of Diseases of the Skin. By JAY F. SCHAMBERG, A. B., M. D., Professor of Diseases of the Skin, Philadelphia Polyclinic and College for Graduates in Medicine. Third edition, revised and enlarged, with 106 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

Five years ago the writer reviewed this manual, stating that it seemed to be a most creditable effort of the kind although, in general, such small works are not to be commended. What was good before has now been improved, through the labors of Dr. Schamberg, whose original investigations into various kinds of

skin diseases are of so much consequence to the profession. The fact that the work has reached its fifth edition shows that it has met admirably the needs of the student and practitioner. Naturally it deals only with elementary facts of dermatology,—those most necessary for the student in schools where some knowledge of specialties is required. The photographic illustrations are about the same as in the former editions, although they seem to have been printed with more scrupulous care.

G. W. W.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. KELLY, A.M., M.D., Philadelphia. Volume III. Thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. 1903. (Cloth, \$2.00.)

The contents of this volume of the clinics include diseases of the gall-bladder and gall-ducts, six articles; treatment, four articles; medicine, four articles; and surgery, six articles. Among the American contributors may be found the names of Musser, Stockton, Deaver, Mays and Belfield. Among the foreign contributors are such men as Finlay, Fowler, Murray, Championnière, Robin, Rudolph and Schwartz. This number is not as profusely illustrated as some of the previous volumes, but it contains much material of great interest. It forms a component of this great series that is a credit to all concerned in creating it.

A TEXTBOOK UPON THE PATHOGENIC BACTERIA. For Students of Medicine and Physicians. By JOSEPH MCFARLAND, M. D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Philadelphia Hospital and to the Medico-Chirurgical Hospital, Philadelphia. Octavo, 629 pages, fully illustrated, a number in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$3.50 net.)

While this work is called a textbook it is more like a story; at the same time it is scientific and serious and is written in such a manner as to be extremely interesting, aside from its value as a reference work on the subject with which it deals. The book is concise in its description of the technical procedures in bacteriology. In nearly every instance a brief account is given of the history of the organism under consideration. Another feature which is most interesting is the description of the pathologic lesions accompanying the invasion of the various organisms. The fact that this is a fourth edition speaks well for the popularity of the book, which has been entirely rewritten and brought up to date. The illustrations, too, are worthy of special mention.

N. W. W.

THE PHYSICIANS' VISITING LIST (Lindsay and Blakiston's) for 1904. Philadelphia: P. Blakiston's Son & Company, 1012 Walnut Street. Sold by all booksellers and druggists.

It is needful in these days of business hurry and worry for every physician to be supplied with those conveniences which economise his time to the best advantage. One of the most important time-savers is a good visiting list. Lindsay and Blakiston's adequately fills all the necessities of such a convenience. Its size is such as to fit the pocket nicely; it is well made of thin, fine paper, with gilt edges, bound in leather, has a pocket, a rubber-tipped pencil, and contains numerous memoranda relating to clinical facts, such as doses of drugs, antidotes for poisons, obstetrical table and the like. The prices range from 75 cents to \$2.25, according to the size of the book required. This is the fifty-third successive year of its publication which is a sufficient justification of all the praise that may be said of it.

THE MEDICAL RECORD VISITING LIST OR PHYSICIANS' DIARY FOR 1904. New revised edition. New York: William Wood & Company.

One of the most popular visiting lists is that published by William Wood & Company and known as the Medical Record Visiting List. It contains a group of miscellaneous facts useful at the bedside, such as dosage, emergency measures, obstetric calendar and blank pages for a variety of records, in addition to the ordinary pages allotted to the daily visitation of patients. It can be had at prices ranging from \$1.25 to \$4.00 according to size, style and quality of binding, the average adapted to the needs of most practitioners being arranged for 30 and 60 patients a week and selling at \$1.25 and \$1.50. Orders should be placed promptly to avoid delay in delivery.

THE FOUR EPOCHS OF WOMAN'S LIFE. Maidenhood, Marriage, Maternity, Menopause. By ANNA M. GALBRAITH, M. D., Author of Hygiene and Physical Culture for Women. With an introductory note by John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania. Duodecimo volume of 247 pages. Second edition, revised and greatly enlarged. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$1.50 net.)

The difficult topic of sexual hygiene has been most admirably handled by this author and the compliment of an early second edition is a deserved one. The sections on hygiene of puberty, hemorrhage at the menopause, and hygiene of the menopause are new and supply what was lacking in the earlier edition. No better book exists of its kind; it is modest and, above all, sensible. Put into the hands of the expectant wife it cannot fail to conserve both her health and happiness and to make her a woman better fitted for motherhood.

M. J. F.

THE AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. NEWMAN DORLAND, M. D., Assistant Obstetrician to the Hospital of the University of Pennsylvania. Containing the pronunciation and definition of the principal words used in medicine and kindred sciences, with 566 pages and 64 extensive tables. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, with gold edges, \$1.00 net; with thumb index, \$1.25 net.)

The fourth edition of this convenient book is issued in an enlarged and revised form. Many words have been added, and altogether it is now as practical and useful a small dictionary as one could wish for everyday use. It is a handy bit of literature to have on the desk for hurried reference work, and is as near perfect as such a dictionary could be made.

N. W. W.

BOOKS RECEIVED.

Transactions of the State Medical Association of Texas. Thirty-fifth Annual Session held at San Antonio, Texas, April 28 to May 1, 1903. H. A. West, M. D., Secretary.

Fourth Annual Report of the Cancer Laboratory of the New York State Board of Health. Conducted at the Gratwick Research Laboratory, University of Buffalo. For the year 1902-3. Transmitted to the Legislature February 1, 1903. Albany: Evening Union Co. 1903.

A Reference Handbook of the Medical Sciences. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. A new edition, completely revised and rewritten. Edited by Albert H. Buck, M. D., New York City. Nine volumes, imperial 8vo. Volume VII. Illustrated by chromolithographs and 688 half-tone and wood engravings. New York: William Wood & Co. 1902. (Price, muslin, \$6.00 per volume; leather, \$7.00 per volume; half morocco, \$8.00 per volume.)

Progressive Medicine. Fifth Annual Series. Volume IV. December, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Material Medica in the Jefferson Medical College of Philadelphia. Octavo, 444 pages; illustrated. Philadelphia and New York: Lea Brothers & Co. (Per volume, \$2.50, by express prepaid. Per annum, in four cloth-bound volumes, \$10.00.)

Lectures on Neurology and Neuroiatry, Psychology and Psychiatry. After the Methods of the class-room, to the Author's Students, and Designed also for General Practitioners of Medicine and Surgery. By C. H. Hughes, M. D., President of Faculty and Professor of Neurology, Psychiatry and Electrotherapy Barnes Medical College, Saint Louis. Edited by Prof. Marc Ray Hughes, M. D. Octavo, pages 417. Illustrated. Saint Louis: Hughes & Co. 1903. (Price, \$3.00.)

A Non-Surgical Treatise on Diseases of the Prostate Gland and Adnexa. By George Whitfield Overall, M. D., Formerly Professor of Physiology in the Memphis Hospital Medical College. Duodecimo, pages 217. Illustrated. Chicago: Marsh & Grant Co. 1903.

A Compend of Pathology, General and Special. A Student's Manual in one volume. By Alfred Edward Thayer, M. D., Professor of Pathology, University of Texas. Duodecimo, pages 711; 131 illustrations. Second edition. Philadelphia: P. Blakiston's Son & Co. 1903.

Transactions of the American Surgical Association. Volume XXI. Edited by Richard H. Harte, M. D., Recorder of the Association. Philadelphia: Wm. J. Dornan, Printer. 1903.

Blakiston's Quiz Compend. Compend of Diseases of the Nose, Throat and Ear. By John Johnson Kyle, B. S., M. D., Lecturer on Otology, Rhinology and Laryngology in the Medical College of Indiana, Indianapolis. Pages, 280, with 85 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

Blood Pressure in Surgery. An Experimental and Clinical Research. The Cartwright Prize Essay for 1903. By George W. Crile, A. M., M. D., Professor of Clinical Surgery, Western Reserve Medical College, Cleveland. Octavo, pages 422. Illustrated. Philadelphia and London: J. B. Lippincott Co. 1903.

Mt. Sinai Hospital Reports. Volume III. For 1901 and 1902. Edited for the Medical Board by N. E. Brill, M. D. New York: Stettiner Bros. 1903.

Bovinine. A Compend of the Practice of Hematherapy as applied to General Medicine and Surgery. Octavo, pages 574. Illustrated. New York: The Bovinine Co. 1903.

LITERARY NOTES.

THE Grafton Press, New York, has entered the medical publishing field and will soon issue a treatise on the surgery of the heart and lungs, by Benjamin Merrill Ricketts, M. D., of Cincinnati. The book will contain about 600 pages of standard octavo text and will be profusely illustrated in an artistic manner. It is announced to issue with the beginning of the new year. Those familiar with the work of the Grafton Press will readily appreciate the high class of printing that characterises all its publications, and this one will be no exception.

PRACTICAL *Medicine* is the name of a monthly medical journal, published at Delhi, India, edited by Ram Narain, L. M. S., that appeared during the year 1903. It is a double-column small quarto and contains a variety of articles and items of medical interest. Its advertising pages carry a number of notices of American medical journals.

THE *Los Angeles Medical Journal* is a new offering from the Pacific coast that presented itself under date of November 15, 1903. It is edited by Ernest S. Pillsbury, M. D., with a staff of associates. The first number contains 62 pages of medical material, most of which has been judiciously chosen and the journal presents a creditable appearance.

ITEMS.

THE Palisade Manufacturing Company, Yonkers, N. Y., has issued a handsome brochure entitled, *The Actual Invalid in Tuberculosis*, which is beautifully printed and illustrated by diagrams and charts. It will be sent to any physician upon application to the publishers.

THE Fellows Hypophosphite Company, of New York and London, has published a pamphlet entitled, *An Illustration of Therapeutic Conservatism*. It is handsomely printed and contains much material of interest. Medical letters may be addressed to Mr. Fellows, 26 Christopher Street, New York.

THE Antikamnia Chemical Company, of Saint Louis, has issued its calendar for 1904, on the obverse of which is the head of a beautiful nun and is entitled, Confidence. On the reverse, in addition to the calendar for the year, is a synopsis of information relating to antikamnia tablets. This souvenir calendar has been sent to every physician in the world. If, perchance, some have failed to receive it, it will be sent upon application to the publishers.

THE Oppenheimer Institute has sent out a pamphlet giving a general statement of the history and development of its work, including that pertaining to the Women's National Auxiliary. This document, which displays artistic taste in typography and make-up, may be had upon application to the secretary, 170 Broadway, New York.

THE M. J. Breitenbach Company, of New York, are again distributing their ever popular year book. The edition for 1904 is uniform with those of previous years, which enables physicians to preserve records of daily memoranda year by year in volumes that are precisely alike in general make-up and binding. It is really one of the most convenient books for the office table with which we are familiar. The incidental advertising of Gude's peptomangan not only is unobjectionable, but serves to remind physicians of an excellent preparation of iron.

THE United States Civil Service Commission will hold an examination at Buffalo, January 27-28, 1904, from which to make certification to fill vacancies in the position of physicians in the Philippines service. Age limit, 20 to 40 years; salary, \$1,200 to \$1,800. Application should be made to the secretary of the local board at the Buffalo postoffice.

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ORIGINAL COMMUNICATIONS.

Gallstones; Their Surgical Treatment.¹

By B. FARQUHAR CURTIS, M. D., New York.

Professor of the Principles of Surgery, University and Bellevue Hospital Medical College; Surgeon to Saint Luke's Hospital, etc.

THE last few years have greatly enlarged our knowledge of the pathology of gallstones and altered our views of the proper treatment of the various conditions caused by them. Many of these changes are analogous to those which have taken place in our opinions of appendicitis and its treatment. In both we have conditions which may be treated medically, that is to say, expectantly, for little direct effect can be produced upon either by medical or hygienic measures, and in both the only real treatment for well marked lesions is surgical and operative.

In both conditions, too, the technique of operation has been so far developed that surgeons are agreed as to essentials, and all the various possible conditions and complications have been met and overcome with appropriate operative procedures. In appendicitis practical unanimity prevails as to what treatment is to be adopted in the different types of the disease, those which require operation immediately, those which can wait for a convenient season, and those which may escape without operation. Less unanimity reigns in the case of gallstones, and it is the object of this paper to attempt to formulate some ideas upon the various cases in which operation is necessary, advisable, or can be dispensed with.

It will be best to give a brief recapitulation of the present status of gallstone pathology as a foundation for our arguments. Gallstones are formed by deposits of the biliary constituents around a foreign body, usually a clump of mucus produced by

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

slight catarrhal inflammation of the gallbladder. This inflammation is due to infection which reaches the gallbladder by ascending the ducts from the duodenum, by penetrating the walls of the bladder from some neighboring focus (suppuration of the kidney, or abscess around the vermiform appendix, for instance); or, finally, by way of the bloodvessels. The last mode of infection is supposed by Chiari and Councilman to be the most frequent. It is analogous to the cases of osteomyelitis of a bone of the extremities secondary to an abscess of the tonsil.

Stones very rarely form in the gallducts, those which are found there having originated in the bladder. Obstruction to the free outflow of the bile hastens the growth of the calculi. When a stone becomes lodged in the neck of the bladder or in the cystic duct it blocks the outflow of the vesical contents, and the intravesical pressure is increased by secretion of mucus and by inflammatory exudate. There are three modes of termination in such a case:

(a) The stone remains in place, blocking the passage, resulting in (1) permanent distension of the gallbladder with mucus, serum or pus; (2) perforation or gangrene of the gallbladder; or in (3) subsidence of the attack when the bladder walls become accustomed to the pressure and resume their powers of absorption, thus removing a portion of the fluid contents.

(b) The stone becomes dislodged, falling back into the bladder, and all the symptoms are relieved.

(c) The stone passes on into the common duct, with the result that, (1) the stone passes on into the bowel; (2) the stone remains in the common duct, causing chronic biliary obstruction, or not obstructing the duct and causing few or no symptoms (becoming "latent" in the last case); or that (3) perforation of the duct occurs, which may result in escape of the stone into the bowel or elsewhere, by the fistula.

In any position of the stone, and at any time in the course of the case, the so-called "latency" may ensue if the stone does not obstruct the biliary passages, and if there is no active infection of the biliary system. This latency may be terminated at any time by infection setting up inflammation or by traumatism altering the position of the stone.

In gallstone pathology there are two main features, obstruction of the biliary passages at some point, and inflammatory complications due to infection, and although the majority of cases combine the two, it is possible to divide them into two practically distinct classes, according to the presence or absence of infection. Infection is at the beginning of the formation of the calculi, and it is also the principal source of the dangers arising from them.

If a gallbladder containing stones becomes infected, suppuration, ulceration, and perforation with all their disastrous consequences are more likely to take place than in a bladder free from stones. This is true whether the stones are so placed as to obstruct the outlet of the bladder or not, although obstruction increases the danger. The same is true of a stone in the common duct, for infection greatly enhances the dangers of that serious condition.

A mild cholecystitis, then, may cause the formation of gallstones, and the presence of the calculi predisposes to a grave cholecystitis with perforation, peritonitis, and the like. These consequences of cholecystitis should be borne in mind by the practitioner, who is rather inclined to underrate the importance of this inflammation, and in fact often overlooks its existence, for it is much more common than is generally supposed. When he meets an attack of colicky pain in the upper part of the abdomen, without jaundice, and without a previous history of attacks of biliary colic, he thinks the trouble cannot be in the biliary system and he talks vaguely of "taking cold," or of gastric or intestinal colic. But the reasoning is incorrect, for a cholecystitis may exist before gallstones are formed, and jaundice is not a usual symptom of cholecystitis. Not infrequently cholecystitis is brought to the surgeon with the diagnosis of appendicitis, and my first case of gallstones was operated upon with that diagnosis. The gallbladder lay low down in the iliac fossa, and the unusually low area of liver dulness was supposed to be caused by a collection of feces in the transverse colon. The recognition of cholecystitis, however, in most cases is easy, for the pain and tenderness correspond to the position of the gallbladder, and the latter can often be distinctly felt. Every case of cholecystitis demands energetic treatment whether gallstones are present or not, and if the symptoms are violent or do not yield soon to treatment, surgical aid should be invoked.

Few will disagree with the general statement that all cases of gallstones complicated with sepsis require surgical treatment. The seriousness of these conditions is illustrated by the following cases:

Charles N., 29 years of age, admitted to Saint Luke's Hospital, October 28, 1900, had general peritonitis of obscure origin. An immediate operation was performed, incision being made over the vermiform appendix which was found normal. A median incision higher up with transverse cut across the right rectus showed advanced cholecystitis. The gallbladder was isolated, aspirated, and secured in the wound with a drain in it. The abdomen was full of sero-pus and was also drained. The patient rallied but died of sepsis forty-eight hours later.

Christine S., 67 years of age, who had been ill for some days with an acute cholecystitis, was admitted to Saint Luke's Hospital, January 18, 1900, in a threatening septic condition, with high fever and rapid pulse. An incision was made over the gallbladder which could be felt plainly, and revealed that organ distended with mucus, and its walls sloughing. It was opened, six small stones removed, and a drain secured in it. The patient did not improve, and died in forty-eight hours with the signs of a septic bronchitis or bronchopneumonia.

Vincent D., 65 years of age, was transferred to my service from the medical side at Saint Luke's Hospital. He stated that one year before he had had an acute attack of pain over the abdomen, growing worse at night and lasting to the present time, with vomiting at intervals, but he never vomited blood. He had lost flesh and strength. He had a dark greenish jaundice, the mucous membranes were very pale. No changes could be detected in the liver or gallbladder. He coughed continually and subcrepitant râles existed on both side of the chest. Patient had a high septic fever with chills and was in a miserable condition. He had extensive endarteritis. An exploratory laparotomy done December 1, 1900, showed no great external changes in the gallbladder or liver. The bladder was distended with bile, but not tense, and without marked inflammatory changes in the walls. No calculi were found. Drainage of the gallbladder was established. Cultures from the bile revealed growths of streptococci and staphylococci. The patient died thirteen days later of continued sepsis. Autopsy showed simply inflammation of the bladder and ducts without abscess formation.

A latent case of great interest is the following:

Edward S. B., 53 years of age, was admitted to Saint Luke's Hospital, November 1, 1896. He had never had any symptoms referable to the biliary system. About one month before he had a sudden attack of fever with chills, and pain in the sciatic nerve, lasting two weeks. An abscess then formed in the back, another in the axilla, and the right testicle became swollen. The axillary abscess was drained after entering hospital, the other was already draining, but the sepsis was far advanced and the patient died four days later. The autopsy showed as the only possible source of the general sepsis a cholangitis and cholecystitis. The gallbladder was adherent, distended with thin pus, and contained a large number of gallstones. In the kidneys were a number of small foci of pus in the cortex and pyramids. There was a large pus cavity in the right testicle. The abscesses in the chest had no direct connection with the gallbladder and must have originated from embolic infection.

Next in gravity to the septic cases are those of continuous, complete, or nearly complete, obstruction of the common duct

without infection. These cases are also generally referred to the surgeon, although even yet surgical aid is frequently not sought until the patient's condition is so impaired that even with the most skilful treatment death follows from cholemic failure of the heart, or uncontrollable hemorrhagic oozing. Good results from operative measures in such cases can only be expected when the patient is still in good condition. Even without the shock of operation, fatal consequences may ensue. Cholemia is dangerous, and so is the exhaustion of the patient from suffering, fever, and limited diet, while long-continued obstruction will hasten the progress of the hepatic cirrhosis and interstitial nephritis which are such common accompaniments of cholelithiasis. In one case of stone in the common duct operated upon by me in private, a successful convalescence from operation (choledochostomy, with removal of a single stone) was followed by only temporary relief, and death ensued about five months later from extensive cirrhosis of the liver and interstitial nephritis. The patient, a woman 50 years of age, had endured almost complete obstruction of the duct for some months and although both liver and kidney disease must have antedated the beginning of the jaundice and were doubtless too far advanced even then for a complete recovery, there can be no question that the degenerative changes were greatly hastened by the biliary obstruction.

Turning now to the simple cases of biliary colic or cholecystitis due to gallstones in the bladder or in the cystic duct, without septic complications, it must be granted that the great majority of these patients pass safely through the attack without surgical assistance. But the same questions often arise here as in appendicitis—namely, shall we operate during the attack? shall we operate after the attack has passed?

During the attack the immediate danger of the patient is decidedly less than in acute appendicitis. The severity of the symptoms furnishes the grounds for the decision as to the necessity for operation. The usual symptoms are pain in the epigastrium, sometimes radiating, more or less febrile disturbance, with or without leucocytosis, nausea, vomiting, abdominal tenderness, most marked over the gallbladder (which may be displaced), and rigidity of the right rectus muscle. The distended gallbladder often can be felt. It used to be thought that jaundice never occurred in these simple cases, and even such a good authority as Robson (*On gallstones*, London, 1892, p. 81) has stated that it is an indication of cancer. More recent experience has demonstrated that jaundice is tolerably common. Riedel holds (*Pathogenese, Diagnose, und Behandlung des Gallensteinleidens*,

Jena, 1903, S. 14) that this jaundice is due to infection traveling to the ducts from the infected contents of the inflamed gallbladder, claiming that he has always found clearly marked evidence of such infection in the softened and altered character of the liver tissue observed in the frequent opportunities afforded in his operations upon such cases. The general view, however, is that the jaundice is due to a mechanical cause, the pressure of the stone lying in the cystic duct or neck of the bladder, or the pressure of the distended gallbladder itself. The distended gallbladder can obstruct the common duct by direct pressure, or by traction, especially when adhesions exist as they commonly do. The truth is that probably both views are correct. The following cases can be related in favor of the mechanical causation of jaundice in nonseptic conditions:

Margaret M., a patient of Dr. L. A. Coffin, 20 years of age, was operated upon by me at her house for suppurative appendicitis March 31, 1900. She had well-marked jaundice at the time, and stated that she had had frequent previous attacks of jaundice, but never any symptoms of appendicitis before this attack. The attacks of jaundice had the ordinary character of catarrhal jaundice. She had a brother about the same age who was also liable to attacks of jaundice and, further, her mother had been liable to jaundice all her life and had died of some liver affection when 30 years old. The appendix was removed at the operation, the abscess cavity drained, and the symptoms referable to the appendix gradually ceased. The temperature fell to normal, but the pulse continued rapid and feeble. Jaundice and vomiting continued for a week. The wound was healing well, but the patient gradually failed and died twelve days after the operation. Autopsy showed the liver and spleen greatly enlarged. The gallbladder, much distended, was obstructed by a single stone at the entrance of the cystic duct. The cystic duct made a sharp s-curve and the protruding neck of the distended gallbladder lay in contact with and compressed the common duct, and also pressed distinctly upon the pylorus. The abscess cavity was filled up and the operation wound granulating. There was no peritonitis and no cirrhosis of the liver. If we had known these facts we would have operated upon the gallbladder, but the patient was too feeble for an extensive operation and the frequent recovery from similar attacks and the fact that these had always seemed to be ordinary catarrhal jaundice are sufficient excuse.

A woman 54 years of age, with chronic jaundice, was operated upon November 9, 1897, at Saint Luke's Hospital. I did a cystostomy, finding a single large stone in a contracted gallbladder pressing upon the choledochus, and removed the calculus. Bile flowed through the drainage sinus for three weeks, then the patient left the hospital cured.

In cases of gallstone in the gallbladder or cystic duct none of the symptoms enumerated above precludes a safe recovery by the passage or by the disengagement of the stone, or by relief of tension when absorption of the contents of the gallbladder takes place. The ordinary measures of palliative and expectant treatment are allowable up to a certain point. But in my judgment if the symptoms persist unaltered for a long time (two or three days in the severe cases, a week in the milder ones) there is serious danger of gangrene or perforation of the bladder, peritonitis, or other grave septic complication.

The special signs of danger of septic accidents are, increasing rigidity of the abdominal muscles, and an increasing leucocytosis, blood examinations being made at intervals of a few hours. A rising temperature is less threatening and the pulse is valueless as an indication of danger. The same must be said of nausea and vomiting, for they are so common in this condition that they lose the usefulness as danger-signals which they possess in appendicitis. In all cases with undue persistence of ordinary symptoms, or with the development of such signals of danger, operation should be undertaken if possible before serious complications have developed. The risks of delay in suspicious cases are far greater than those of operation.

When the acute attack is over, the patient may be entirely free from symptoms, whether the stone has passed, or been dislodged, or the bladder has been relieved by absorption of its contents, and often it is impossible to say which of these modes of recovery has prevailed in the particular case. But even when the stone has been proved to have passed, by being recovered in the feces, there is a probability that others remain which may give occasion to trouble later. According to Riedel (*loc. cit.*, p. 2) in 44 per cent. of his cases in which gallstone colic attacks had occurred there was a calculus in the bladder too large to pass the cystic duct, the attacks having been abortive; therefore we may assume that nearly one half of the patients still retain the offending calculus in the gallbladder after an attack of biliary colic. Mayo states (*Boston Med. and Surg. Jour.*, 1903, cxlviii., p. 545), "We have never operated upon a patient who has passed calculi that we have not found more in the gallbladder." I would not, however, be willing to make the extreme statement that all such cases must have stones remaining. In Saint Luke's Hospital, December 12, 1900, I operated upon a gentleman 55 years of age, with chronic obstructive jaundice, which had lasted in variable degrees for a year. A stone in the common duct was considered certain and the diagnosis was confirmed by Dr. E. G. Janeway. The gallbladder was contracted and adherent, but contained no

stones. The common duct was opened and explored, no stone found and the passage demonstrated free to the bowel, having a diameter of three-eighths of an inch at the papilla. The duct was drained, the gallbladder freed from adhesions and left in place. Bile flowed only nine days, and the sinus closed in about four weeks. The patient had remained perfectly well, when last seen $2\frac{1}{4}$ years after the operation. We concluded that the obstructing calculus had passed through the papilla just before the operation.

In another case which was operated upon at my clinic at Bellevue Hospital last spring by a visiting surgeon from Europe, who has had a wide experience in gallstone surgery, after he had agreed in the diagnosis of stone in the common duct, only a few very small stones were found in the bladder and none in the common duct. The duct was found widely dilated and it was considered probable that the stone had passed just before the operation. The patient was a woman 49 years of age, with no previous attacks of jaundice, who had had pain in the region of the gallbladder and jaundice for several weeks. The gallbladder was contracted and surrounded with dense adhesions. All the stones seen were too small to have caused obstruction of the common duct. These cases show that a single stone may cause obstruction for a long time, and yet may not be so large but that it may be passed—and passed on the eve of operation.

In the great majority of cases, however, calculi will be found after the attack has passed off, even if the originally obstructing stone has reached the bowel safely. A careful study of such patients will often disclose slight and rather indefinite symptoms, such as various forms of "indigestion" or dyspepsia, requiring them to be very careful in their diet or even reducing them to actual invalidism, just as one finds various slight ailments in patients with chronic appendicitis which disappear after removal of the appendix. I have usually found that removal of gallstones which had given no symptoms improved the health or at least the sense of well-being of the patient. They often exclaim with joy, "I find that I can eat everything now." After the attack has been recovered from, a careful examination of the patient may also reveal signs of remaining stones or an inflamed gallbladder such as continued resistance in the rectus muscle, or a little tenderness over the bladder, or possibly the calculi can actually be felt against the vertebral column (Riedel). If symptoms persist, or even when there are no symptoms in the interval, but frequent recurrent attacks take place it may be considered certain that calculi or some serious lesion of the gallbladder exist which can be definitely cured by operation.

The advantages of operation performed while the stones still remain in the gallbladder or cystic duct and before grave infection has developed are numerous.

1. The serious accidents of infection are avoided and any inflammatory condition which may exist can be improved or cured just as drainage cures urinary cystitis.

2. The stone is removed before it enters the common duct, thereby preventing all the dangerous consequences likely to follow the presence of a stone in that passage.

3. Further attacks of cystitis and colic are prevented.

4. Further calculus formation is prevented or impeded, for the stones are formed in infected gallbladders and the latter may be removed by operation or rendered so healthy by drainage that no more calculi will form. Kehr (*Münchener med. Wochenschrift*, 1902, Nos. 41, 42 and 43) estimates the recurrences of stone, adhesions, and other complications after operation in his cases at 10 per cent. Schott (*Beiträge zur klin. Chirurgie*, xxxix., 1903, S. 427) gives the final result of 180 cases from Czerny's clinic followed for five or six years after operation, including serious conditions requiring choledochotomy, cholecystenterostomy, and the like, and found only 5 per cent. had symptoms referable to the biliary system. Not a single case had another gallstone form after operation.

5. It must be remembered also that latent cases are by no means free from danger, so that the individual who has recovered from an attack of colic cannot be considered cured even if he is entirely free from symptoms for years, as it is probable that stones remain behind or that some chronic cholecystitis persists. The possibility of secondary pancreatitis must be kept in mind, and also that of cancer of the gallbladder, which is more common than has been supposed. Riedel states that he has observed in his practice over fifty cases of cancer of the gallbladder, and it is to be noted that while the presence of gallstones is universally accepted as the principal cause of this disease, the stones have generally existed without previous symptoms, the first sign of trouble being given by the tumor of the gallbladder itself.

6. Without reference to more important results, it is the general feeling of those with experience in the surgery of cholelithiasis that in the latent cases, while the patients do not present symptoms pointing directly to the biliary system, they are afflicted with various dyspeptic complaints and that the latter can be relieved or permanently cured by operation.

A Resume of the Treatment of Gonorrhea, with Report of Cases.

By CLARENCE G. CLARK, M. D., New York.

Assistant Surgeon, New York Hospital of Relief, Genitourinary Clinic; formerly assistant Surgeon, New York Hospital O. P. D., Genitourinary Department.

GONORRHEA may be divided into two main groups—namely, acute and chronic, according to duration; and into two classes—anterior and posterior—according to the location of the disease. In the beginning all cases are anterior, that is, confined to the anterior or penile portion of the urethra, but from inefficient treatment or neglect many become posterior by direct extension. Between the two stages, acute and chronic, we have in many instances an intermediary stage, or so-called subacute. This stage is accompanied by very little pain and by a thin watery discharge, which is very often entirely free from gonococci. As the disease progresses backward another acute stage is very often developed, when the posterior urethra becomes involved. This is accompanied by severe pain which is often referred to the rectum. The discharge in this stage may be very slight or entirely absent, and is often thin and watery.

As chronicity becomes more marked, the pain decreases, and the discharge dwindles to the morning drop. This stage of the disease is the most obstinate and requires months of careful treatment before satisfactory results are obtained. It is generally complicated by strictures requiring the use of sounds and other means of dilatation. The seat of the process in this stage is generally the posterior urethra, although the anterior may be involved. This, however, I think, is rare. A chronic posterior urethritis may last for years, and while it causes very slight inconvenience to the patient, it is a constant source of danger to others. Such a patient lulled into a false sense of security by the very mildness of his symptoms may marry and then cause untold suffering to an innocent woman. It should be every physician's duty, whether genitourinary surgeon or a general practitioner, to check the disease before it reaches this stage, and this, I think, is possible in all cases if seen early enough. It has been my fortune, through my connection with a large metropolitan dispensary, to observe gonorrhea in all its stages, and it is for the purpose of refreshing the practitioner's mind and of reviewing some of the newer methods of treatment that this paper has been written.

Of late years the profession has been so flooded with preparations possessed of absolutely no value, and many of which are merely old remedies under new and high-sounding names, that one of necessity looks with scepticism upon everything new brought before him. In no field is this so true as in genitourinary surgery where the disease under discussion offers such varied symptoms, for the relief of which new remedies are constantly introduced. It has, therefore, been my custom whenever anything new appealed to me particularly to test it carefully in a number of selected cases.

In the treatment of gonorrhea we have at our disposal three distinct methods in the beginning of the disease. These may be enumerated as follows: (1) symptomatic, *i. e.*, by internal medication designed to relieve special symptoms as they manifest themselves; (2) by hand injection; (3) by irrigation. The last named came into considerable prominence of late years and for a time promised much, but recently it has gone into more or less disuse. Many of the leading genitourinary surgeons have found that they can get better results with less danger of extending the infection by hand injections, since the force can be better regulated with these than with the irrigator, and although the quantity of solution used in the former method is less, the strength can be advantageously increased. Probably the sole advantage of the irrigator over other methods is the impression made upon the patient.

The best method of treating acute and subacute gonorrhea is then a combination of the first two methods, *i. e.*, symptomatic and the use of hand injections. The injections are best made by the physician himself and at least once daily. The patient is apt to use too great force in injecting himself. In the symptomatic or internal treatment we have in acute cases one marked symptom to relieve, *i. e.*, the pain on urination. Our effort should be to relieve this and at the same time to render the urine antiseptic. For this purpose I have derived excellent results from a comparatively new urinary antiseptic, a combination of anhydromethylen citric acid with hexamethylen-tetramin. The latter substance is an old remedy, and has been extensively used. Its action depends upon the liberation of formaldehyde, the amount set free, however, being under certain circumstances very small, especially if the urine is markedly alkaline, and in strongly ammoniacal urine it is practically *nil*. But in combination with anhydromethylen citric acid its efficiency is augmented, the formaldehyde being readily liberated both in alkaline and acid urine. Aside from its sterilising the urine it renders it less irritating, and thereby relieves the pain during micturition.

I have recently used this preparation, which is known as helmitol, in several cases of acute and chronic urethritis with excellent results. Nearly all the patients experienced relief immediately (within 24 hours) after taking it. Helmitol possesses an advantage over urotropin (ammonium formaldehyde) in being well tolerated even in large doses. It has proved especially useful in relieving the tenesmus of posterior urethritis and prostatitis, and I have not found it to be contraindicated in acute gonorrhea, being used in connection with hand injections. In three cases where the pain on urinating was intense it afforded relief in 24 hours.

I will describe below in detail six cases illustrating my present method of treatment, each representing a different stage of gonorrhea. Three of them I observed at the dispensary; the other three, including a case of cystitis, occurred in private practice.

Case I.—M. B., printer, 18 years of age, contracted gonorrhea eight days ago. First noticed burning on urination three days ago, which rapidly became worse and was accompanied by a thick yellow discharge. He complained that the pain on urinating was excruciating and that he voided his urine about every 15 minutes. He had very little sleep for the past two nights; discharge was profuse. Examination: discharge reveals large numbers of gonococci; urine acid in reaction and very high colored; inguinal glands enlarged on both sides. Treatment: helmitol, 15 grains every four hours. Injections of protargol, 1 per cent. were used, but the pain was so severe that they had to be discontinued. Instructed the patient to call daily. On the next visit he stated that the pain was much relieved, and that he voided larger quantities of urine at less frequent intervals. On the second day the pain was entirely gone. I then decreased the helmitol to 15 grains twice daily, which was sufficient to control the pain. I also resumed the use of injections of protargol 1 per cent., injecting two syringefuls daily (each containing 2 drachms) until the eighth day, when the discharge was very watery in character, and on examination contained very few gonococci. I then substituted zinc sulphocarbolate (2 grains to the ounce), which I injected for three more days, at which time the discharge had ceased entirely. On the twelfth day after beginning treatment this patient had absolutely no discharge and successfully passed the beer test.

Case II.—J. H., aged 26 years, carpenter, has had gonorrhea for four weeks. The pain of the acute stage diminished at the end of the first week, and the patient who had been using advertised preparations thought himself cured, although he noticed a slight discharge every morning. Has had six previous attacks. He first came to my office on November 3, 1903, complaining of

severe pain in the rectum; discharge very thin and watery; frequent urination; urine cloudy; reaction, alkaline; pain is increased immediately after urinating and is especially severe at night, keeping him awake. Microscopical examination reveals gonococci in the discharge. Diagnosis: acute posterior urethritis, following an anterior urethritis of specific origin. On examination per rectum the prostate was found enlarged and tender. Treatment: the first thing to be done was manifestedly to relieve the tenesmus. For this I administered helmitol in 15-grain doses every four hours, and gave no other treatment at first. On November 4, the pain was no better, so the helmitol was increased to 20-grain doses every four hours. On November 5, the pain was less severe, the patient having had a good night. The drug was continued in the same dose, and on the sixth the pain was nearly gone. On this day the patient showed me a rash on his arm. This was papular in character and extended over the extensor surface of the right forearm. Whether due to helmitol or not I am unable to state, as I have never observed the same rash following the use of the drug. On November 6, I discontinued the helmitol, as the pain was gone, and began washing out the bladder with a solution of potassium permanganate, 1-3000, and massaging the prostate. This patient is still under treatment, as the discharge has not entirely disappeared, and the case is only cited to show the action of helmitol in relieving the tenesmus of acute posterior gonorrhea. I am now passing sounds twice weekly, and giving him deep injections of a 2 per cent. solution of protargol. The prostate has decreased in size, and he has not had any recurrence of pain on urinating nor of the tenesmus.

Case III.—A. G., aged 23 years, machinist; no previous history; intercourse five days ago; first noticed burning on urination last night which increased, until today it is very severe. Discharge first noticed this morning, it being very thick and yellowish. Examination under microscope reveals gonococci in large numbers. Pain is so severe that I did not consider it wise to inject or irrigate. Wishing to try the effect of helmitol in relieving the ardor urinæ accompanying the early stages of gonorrhea I perscribed it in 15-grain doses every four hours. Second day: pain no better; discharge worse. Last night patient suffered considerably from painful erections. I increased the helmitol to 18 grains, every four hours, and prescribed lupulin gr. 2, and camphor monobromate gr. 1, in pills to be taken every three hours during the evening. Third day; pain diminished, but still severe during urination; chordee did not trouble him much last night; continued the same treatment. Fourth day: pain completely gone. Discharge is, however, worse and I started irrigation with protargol 1-500; still continued helmitol. Fifth day: pain gone; discontinued helmitol; continued irrigation daily, increasing the protargol to 1-300 by the ninth day; discharge gradually diminished till by the twelfth day there was only a thick watery secretion,

which contained no gonococci. I stopped the irrigations on this day and injected zinc sulphocarbolate, 4 grains to the ounce, for three days longer, by which time the discharge was all gone and treatment was discontinued. Patient has had no recurrence. In this case this formaldehyde compound certainly relieved the pain of the early stages of an acute gonorrhea, and I could see no reason why it is contraindicated in this stage.

Case IV., W. F., aged 21 years, first visit November 4, 1903, has had gonorrhea for eight weeks; has had more or less pain on urinating right along with discharge, which from a thick, creamy consistency has become more or less watery. About four days ago he was seized with severe urinary tenesmus with pain on micturition and slight hematuria. This has been getting worse until last night he had to get up twelve times to pass urine, which was streaked with blood and caused him great pain while passing it. No gonococci could be found in the sediment; no albumin. I prescribed helmitol, 15 grains every four hours, and injected the posterior urethra and bladder with warm bicarbonate of sodium solution. On November 5 the urine was still turbid and pain remained the same. On testing the urine with phloroglucin and sodium hydrate for formaldehyde a strong reaction occurred. Treatment continued. November 6, patient slightly better; passed urine only seven times during the night. Urine is no longer blood-stained, and the first portion is clearer than the second. Dose of helmitol raised to 20 grains, every four hours. November 7, the patient much easier; passes larger quantities of urine and much less frequently; both portions are clear; tenesmus is markedly diminished. Treatment continued, with the exception that I substituted a 1-500 solution of protargol for the bicarbonate in the irrigator. November 8, pain and tenesmus practically gone; only passed urine twice during the night; continued the helmitol for two days more, when the pain was completely gone; the discharge remained about the same. On passing a sound, I found stricture in the posterior urethra which would only admit the introduction of a 22 F sound. I began dilating this and injecting 2 per cent. protargol solution through a Keyes-Ultzmann deep syringe. This patient is still under treatment, and has improved so that a sound is passed only twice a week. His discharge is almost gone, and I can pass a 30 F sound without difficulty.

Case V.—W. B., aged 68 years; gonorrhea 30 years ago, from which he developed a stricture. This has not troubled him much in past ten years, but for the last month he has been troubled with frequent urination accompanied by tenesmus; this has been getting worse until he is now urinating every 10 to 15 minutes, the desire not leaving him when urine is voided. On examination I found that the stricture was so tight that it was with difficulty that even a No. 14 F could be passed. His prostate was also enlarged.

The urine was strongly ammoniacal from decomposition; tenderness over pubes. Diagnosis: acute cystitis resulting from retention of urine caused by stricture and prostatic hypertrophy. No gonococci were found in the urinary sediment and there was no discharge. I prescribed helmitol 15 grains three times daily; prostatic massage and dilatation of stricture. The patient was put to bed and upon a strict milk diet. The helmitol was given in large amounts of water. For the first three days a catheter was inserted to drain the bladder, washing it out with a solution of bicarbonate of sodium every day. The pain and tenesmus rapidly disappeared and the urine cleared. By the third day I was able to remove the catheter and begin the passage of sounds and bladder irrigation daily. The helmitol was continued for a week, by which time he voided urine naturally and only a trifle more frequently than normal. In two weeks the stricture was dilated sufficiently to allow the passage of a No. 30 F sound. For the bladder washing I substituted protargol in 1-300 for the bicarbonate of sodium. This case was discharged at the end of a month not as a permanent cure, but temporary. It is impossible to permanently cure these cystitis cases caused by prostatitis in the aged. The case, however, serves a good example of the action of helmitol in preventing fermentation, and thus relieving the tenesmus.

Case VI.—J. J., aged 20 years, has had gonorrhea for five days; thick discharge containing large numbers of gonococci; ardor urinæ is not very severe, but he has no control over the bladder muscles, micturating almost without warning. Urine is alkaline in reaction. Treatment: I prescribed helmitol in 15 grain doses after meals, with 1-60 grain of strychnia before meals; injected the patient daily with 1 per cent. protargol solution. The frequency of urination lessened after two days of this treatment and pain entirely disappeared. Continued the injections daily. In giving these a two-dram syringe is used, and the anterior urethra is filled with the solution which is allowed to remain for about five minutes by squeezing the lips of the meatus with the fingers. This is repeated once and should be done daily or twice daily, if possible. The discharge in this case diminished by the eighth day, when it became thin and watery. I then substituted zinc sulphocarbolate, 4 grs. to the ounce, for the protargol, and by the twelfth day the patient was discharged cured, having successfully passed the beer test. The helmitol in this case was continued throughout and succeeded admirably in relieving the irritation at the bladder neck.

These six cases represent various phases of uncomplicated gonorrhea and, I think, suffice to show the treatment used. In some cases it will be noted the irrigation treatment was employed, but in the average acute cases of gonorrhea I prefer hand injections. In the posterior cases where the process has already trav-

eled as far back as it will go, the irrigation method will cover more ground and reach more of the diseased membrane than will the injections, and in those cases I have found it preferable.

I have employed helmitol with distinct service in almost all cases of gonorrhea in rendering the urine bland and antiseptic. In warding off the urethral chills, so often experienced after passing sounds or after operations on the urinary tract, I have found it to be almost a specific. I made it a custom to administer helmitol in 15-grain doses, three times daily, to all patients requiring frequent passage of sounds, and since its use have had no cases of urethral chill. It is preferable to ammonium formaldehyde in absence of irritating qualities and in not interfering with the digestion in the least.

As to the preparation used for injecting protargol, but little need be said, as it is so well known already. It has proven itself to be of more service in gonorrheal inflammations than the older antiseptics, such as bichloride of mercury, potassium permanganate, and the like. It can be used as an injection in $\frac{1}{2}$ to 2 per cent. solutions or as an irrigation in 1-300 to 1-500 solution. In posterior urethritis it is my custom to irrigate the posterior urethra and bladder and to give the patient deep instillations through a Keyes-Ultzmann syringe. These cases almost invariably require the passage of sounds as they nearly all have some degree of stricture.

For the complications of gonorrhea but little can be said here, as they are too numerous to more than mention them in an article of this character. For epididymitis and orchitis I have found guaiacol and olive oil, equal parts, to be very efficient. This should be applied lightly to the scrotum every night with a camel's hair brush. A suspensory bandage should be worn, or the testicles may be strapped with adhesive plaster. These are the more frequently met with of the serious complications of gonorrhea, and it is hardly necessary to mention the others. If the acute case is seen early enough and handled properly the complications will be comparatively few.

335 EAST EIGHTY-SEVENTH STREET.

ANTI-RHEUMATIC.

R	Sol. et pot. tartrat.....	$\frac{1}{2}$ oz.
	Tongaline, q. s. ad.....	3 ozs.

M. Sig.—A teaspoonful three times a day.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

THE eighty-third annual meeting of the Medical Society of the County of Erie was held in the rooms of the Society of Natural Science, Buffalo, January 10, 1904, the president, Dr. Ernest Wende, taking the chair, at 10 o'clock a. m. The minutes of the semi-annual meeting, held June 9, 1903, were read and approved.

Resignations were received from Drs. E. H. Tweedy, Cora B. Lattin, Henry B. Lattin, and Marian Marsh. On motion of Dr. H. R. Hopkins these resignations were accepted and the respective parties notified that under the law they would still remain responsible to this society for their dues.

Dr. WILLIAM WARREN POTTER, chairman of the Committee on Membership, presented the names of Dr. Bruce L. Cook, Dr. John Messmer, Dr. Marshall Clinton, Dr. Francis N. Pitass, and Dr. Regina Flood Keyes as applicants, and moved that they be elected members of the society. The motion was carried. The president, Dr. Ernest Wende, read his valedictory address. He emphasised the most important work accomplished by the society during the past year in the conviction of a notorious individual with a bad criminal record in several states, and enlarged the valuable work of the district attorney in this respect.

On motion of Dr. J. B. COAKLEY, a vote of thanks was tendered the retiring president for his impartiality and for his interesting address.

On motion of Dr. WM. C. KRAUSS, a vote of thanks was tendered the district attorney, and particularly Mr. Frank Abbott, his first assistant, for securing the conviction referred to in the president's address.

The president appointed the following nominating committee: Drs. F. F. Hoyer, J. B. Coakley, H. Lapp, J. H. Grant, and R. S. Meyers.

The committee presented the following list of nominations: president, William C. Krauss; vice-president, John D. McPherson; secretary, Franklin C. Gram; treasurer, Edward Clark; librarian, William C. Callanan; chairman of committee on membership, William Warren Potter; board of censors. Drs. Henry R. Hopkins, John H. Grant, Henry Lapp, Bradley Dorr, Marshall Clinton.

These names were duly balloted for and the candidates declared elected.

Delegates to the Medical Society of the State of New York: Drs. Harry Mead, Edgar A. Forsythe, Benjamin F. Rogers, Joseph Burke, De Lancey Rochester, Charles G. Stockton, John Mesmer, L. G. Hanley, Carlos E. Bowman, Clarence Tyler, F. M. Gipple, Chauncey Pelton Smith, W. S. Renner, Bernard Bartow, P. H. Hourigan, Marshall Clinton, N. W. Wilson, W. C. Jolls, C. A. Clements, A. H. Briggs, E. E. Briggs, Walter D. Greene, Henry D. Ingraham, John B. Coakley, Frederick F. Hoyer, F. H. Milliner, F. E. Fronczak, Grover Wende, Wm. H. Thornton, Eugene A. Smith, Regina Flood Keyes, Henry Lapp, Thomas F. Dwyer, S. A. Dunham.

These names were balloted for and the candidates declared duly elected.

Dr. MATTHEW D. MANN read a paper entitled, Some points in the treatment of uterine displacements, which was discussed by Drs. William Warren Potter, H. E. Hayd, and DeLancey Rochester.

Dr. EDWARD CLARK submitted his annual report as treasurer, which was referred to an auditing committee, consisting of Drs. C. A. Clements and E. E. Briggs, who reported the accounts correct. The treasurer's report showed that \$316 were collected in dues; \$47 were received as proceeds of a fine; \$200 were paid the society's attorney, and after payment of state society dues and other incidentals, a balance of \$15 was left in the treasury.

Dr. HENRY R. HOPKINS submitted the report for the board of censors, as follows:

REPORT BOARD OF CENSORS, JUNE 20, 1903-JANUARY 12, 1904.

To Medical Society of the County of Erie:

The undersigned as Board of Censors of your society, begs to submit the following report covering its work from the date of the last semi-annual meeting to the present time.

During this period a number of cases of alleged violations of the public health law have come to the attention of your board, all of which have been investigated by the board with the aid of its counsel. Eight of these cases were found to require action and all of these except two have now been disposed of. In one of the cases the person complained of died while investigation was in progress; in another the Board took action resulting in the offender leaving the city and state. In one of the cases the situation was so serious that the board decided upon a criminal prosecution of the offender and a warrant has been issued for his arrest.

The attitude of the board in all cases has been to prosecute only when the ends of justice would be promoted thereby; hence, it has been felt that in cases where persons have unwillingly and unintentionally violated the law the only action necessary was

to take such steps as to effectually prevent the recurrence of violations. Consequently there has been but one public prosecution instituted by the board. This does not mean, however, that your board is averse to prosecuting vigorously and making a public example of serious offenders. In this connection we would state that in addition to the cases before referred to, all of which were of unusual importance, your board has discovered that a number of barbers in a certain section of the city have been regularly engaged in administering treatment known as wet-cupping and dry-cupping. The board has also discovered a number of midwives who have been in the habit of administering herbs, medicines and using instruments, and who have been regularly violating the laws of the state in these particulars. Upon investigation of all of these cases the board found that the violaters were acting without criminal intent. The practices have now been stopped, but it is the intention of the board in the future to prosecute without leniency in all cases which may hereafter arise, and to endeavor to have the violaters of the letter of the law severely punished.

The board begs to report further that the case of the People against A. J. Weichers is very nearly ready for argument before the appellate division. Weichers, it will be remembered, was convicted of conspiracy and was on March 31, 1903, sentenced to a term of nine months in Erie County penitentiary. A motion for new trial was made and denied and a motion for the granting of a certificate of reasonable doubt was also made and denied. Later, however, a second motion was made asking for the granting of a certificate of reasonable doubt and for a release of the prisoner on bail pending the decision of the appeal. This motion was based upon a legal technicality and upon it the hearing was granted, Weichers being released from the penitentiary, June 16, 1903, upon bail bonds aggregating \$4,000.00, covering the case referred to and also the indictments pending. We are informed by the district attorney that the case will probably be argued on appeal within the next thirty days.

H. R. HOPKINS,
F. E. FRONCZAK,
HENRY LAPP.

The report was received and the board was authorised to continue its attorney, and was allowed \$30 for detective expenses.

Dr. WILLIAM WARREN POTTER moved to remit the dues of the secretary, treasurer, and librarian during their terms of service. The motion was adopted.

Dr. H. R. HOPKINS called attention to the proposed legislation, by which the sick who are cared for by the city are to be sent to the County Hospital, instead of any hospital as heretofore. He moved that the committee on legislation of this society

have authority to watch the progress of this bill and invoke the aid of the state society, if necessary, to prevent its passage.

Dr. DELANCEY ROCHESTER seconded the motion and spoke strongly against the bill, as did Dr. A. A. Hubbell and Dr. W. C. Callanan.

Dr. J. A. PETTIT thought we ought to know what the bill really is before the society takes definite action.

Dr. EDWARD CLARK explained some of the features of the bill, and said he thought Mayor Knight's idea was to give the poormaster power to send certain chronic patients, especially tubercular cases which are now scattered throughout hospital wards and infecting others, to the County Hospital.

The motion prevailed.

Memorial addresses upon members who died during the year 1903, were then delivered:

IN MEMORIAM.

HERMAN MYNTER, M. D.

Born in Karebeck, Denmark, September 2, 1845.

Died in Buffalo, N. Y., February 9, 1903.

Delivered before the Medical Society of the County of Erie at its eighty-third annual meeting upon request of the president,

By HENRY REED HOPKINS, M. D.

Ninety-Seventh President of the Medical Society of the State of New York.

America suffers many wrongs in the matter of undesirable emigrants from army-ridden, poverty-stricken Europe. America also enjoys the precious privilege of being sought as the future home of many of Europe's sons, who are men of distinguished ancestry, of high attainments, of noble ideals, of unusual and remarkable preparedness for sharing in full measure in the boundless opportunities for self-command, self-development, self-knowledge, which constitute the priceless offering of America to humanity.

Our deceased fellow, in whose memory these lines are drawn, Doctor Mynter, was a conspicuous example and illustration of the power of free America to attract not the feeble, the oppressed and the helpless alone, but to win and hold the strong, the well-equipped, the reliant, the masterful of Europe's sons, and after this manner the old world does enrich and endow the new. In the free soil and the free air of America, it requires but few like Jacobi, Fenger, and Mynter to compensate for an entire shipload of hewers of wood and drawers of water.

Dr. Mynter's ancestors have been traced back ten generations with reliable data, and the name is found in various records back

to 1360. The name Herman Münter occurs in 1375, when the death of a proconsul of that name is recorded. From this time the name Münter appears constantly in every century, in every case in a connection showing that the Münters were people of means and position. The home of the family till 1765 was Lübeck, Germany, formerly one of the free cities of the Hanseatic league. In the council chamber of Lübeck, now in use, are to be found the portraits of two first burgomasters, whose blood runs in the Münters veins. One is Herman Münter and the other Herman Kron, who represent the family in the generation of great, great grandfathers.

In the year 1765, Balthasar Münter, Dr. Mynter's great grandfather, was called to Denmark by King Frederick V., to be his spiritual adviser, German being then the court language of Denmark. This Balthasar Münter was a graduate of the University of Jena, having taken his master's degree there in 1757. He became the founder of the family in Denmark. His son, Dr. Frederich Christian Carl Heinrich Münter, was also born in Germany and was educated at the German universities of Gotha and Göttingen. He was an extensive traveler and orientalist and a patron of the arts and of artists, the Danish sculptor Thorwaldsen being one of the artists who was materially helped by his beneficence.

Dr. Frederich Münter attained greater eminence than any other member of the family; he became archbishop of Denmark, and it was while the episcopal palace in Copenhagen was his residence that his son Frederich, Dr. Mynter's father, was born. It is thus seen that Dr. Mynter's father was the first generation of the family to be born in Denmark. He was also the first to be educated there, taking his degree from the University of Copenhagen. He became pastor of the church of Karebeck (pronounced Carbeck), Denmark, and in this little village by the sea, his son Herman Mynter was born, September 2, 1845.

Herman received his education in the Latin school of Herlufsholm and the University of Copenhagen, where he was graduated in medicine, *cum honore*, in 1871. In 1872-73 he served in the Danish navy as surgeon, and in 1875 he came to America and to Buffalo, and began for the first time the independent practice of his profession. On his mother's side his ancestors were for generations members of the legal profession, as on his father's side they had been clergymen. His father intended him for the church, and with this in view he was started in a course of Hebrew, but the youth Herman, to use his own language, thought it good that, in a family where there had been so many preachers some one should practice, and so Hebrew was dropped and anatomy taken up. To his chosen profession he became absolutely devoted, and nothing was able to turn his thoughts from it except his love for historical reading. This was his only hobby. He believed that every physician should have a hobby to ride. One less in line with his work might have helped to prolong his life.

Dr. Mynter was a frequent contributor to the literature of his profession through medical and surgical periodicals, his subjects being for the most part surgical. In 1897 he published, both in English and Danish, a treatise on appendicitis. This was presented to his Alma Mater as his thesis for the degree of Doctor of Medicine. The thesis was accepted and the degree granted. A dispensation from the king, however, was needed to permit the granting of the degree in the absence of the recipient.

Dr. Mynter's love of his native country was one of his most cherished thoughts, and his enthusiasm for America was equally great. He was never known to utter one harsh, or unkind, or unjust criticism of America or Americans, and to be able to serve the country of his adoption gave him his keenest joy.

Dr. Mynter's success in his profession was immediate, conspicuous, and sustained. His preparation for his life work was unusual: as a physician he was conservative, wise and resourceful; as a surgeon he was profound, brilliant and heroic; as a teacher he was thorough, earnest and masterful.

From the many hundreds of letters of sympathy and condolence the sad event of his death brought from all parts of the world to his bereaved family, I gather the following as competent testimony of the real value of Dr. Mynter's life and character:

Rev. W. S. Hubbell, D. D., of New York and Plainfield, N. J.

I knew him (Dr. Mynter) pretty well before those days at the Sisters' Hospital, but during those weary weeks our attachment increased manifold. We saw him day after day for nearly three months and saw him, too, at his best in the midst of his varied responsibilities and duties. Under his quick, peremptory manner, we found out his kindness of heart, his devotion to duty, his fierce hatred of all hypocrisy and humbug, his enormous capacity for work, his unselfish readiness to aid everyone in distress, his real gentleness with the suffering, and his conscientious resolve to leave nothing undone that could save any patient. We had many religious talks at my bedside and many amusing theological discussions. Perhaps he started these excursions into theology for the sake of diverting my mind, but often they sprang out of some fatal case in the wards near us, or some critical operation where he seemed to hold the life or death of his patient in his hand. But he used to agree that after all it was God's will that would be done, with his skill or in spite thereof. He was a devout man at the bottom of his heart, and lived with the fear of God before his eyes, despite a doctor's peculiar temptation to live in the natural realm alone.

Mr. W. H. Lecky of London, historian and member of parliament:

I saw much of Dr. Mynter at Nauheim last summer, and felt deeply his great charm, both intellectual and moral, and had

always hoped that we might meet again. It then seemed as if Nauheim had done its healing work and I am deeply sorry to hear of his early death. It is a brilliant and most useful life cut short in its prime.

Constantine Brun, Minister of Denmark to the United States:

Denmark and every Dane has reason to be proud of Dr. Mynter, and I shall never forget the cordiality and genuine kindness with which he always greeted me when we met. It is a great disappointment to me that he should leave us so early.

Hon. James O. Putnam:

I, too, have in the death of Dr. Mynter lost a valued friend, and one of a noble manhood. His native country was proud of its distinguished son, and in his adopted country he won professional eminence and personal distinction. To this was added a happy home and friends who honored and loved him.

Mr. Herbert G. Lord, Columbia University:

Dr. Mynter was ever so fresh in feeling, so open and straightforward in word, so delightful to know. No one I ever knew was like him, with a characteristic touch all his own, saturating the very modulations of his voice as it did in turns of phrase and flash of eye. This made him stand out among one's friends as a marked and unusual man. I do not like to think that I shall never have converse with this man again. I cannot believe that such men are, with how long labor, formed to come up as the grass and be cut down. One must believe they are of too much worth to be lost, must keep their personal values somewhere for future joys given and received.

Dr. DeLancey Rochester:

It was my privilege to know Dr. Mynter well in the relation of disciple and master when I was interne at the General Hospital, and he was one of the attending surgeons. At that time I was impressed with the thoroughness of his education and with his good surgical judgment. His methods were an inspiration to the younger men to strive for similar attainment. His loss will be felt deeply by the medical and surgical world.

As years have advanced I have learned to know Dr. Mynter better and to appreciate highly both his medical knowledge and his social qualities. At any social gathering of men a pleasant time was assured if Mynter were there, and we will miss him greatly at such gatherings in the future.

Mr. L. G. Sellstedt:

I loved Mynter as I have loved few men. I doubt if any out of his own family better knew the noble and gentle spirit that dwelt in that body. His towering intellect was apparent to all who associated with him, as was his skill to his professional

brethren, but the finer fibers of his soul were often hidden by that uncompromising honesty of character which could not prevent him from speaking what was in his mind.

Dr. H. Newton Hinneman of Bad Nauheim and Paris:

Dr. Mynter has left a high record behind him, an inheritance of which his family may justly be proud. He won the affection of the profession as well as that of a large clientèle, and as time goes on the name of Mynter will occupy a proud position in the records of the profession's great men. Surely there is consolation in this legacy, than which the millions in the banks pale into insignificance.

Headquarters, 65th Regiment, N. G. N. Y., Buffalo, N. Y.

The board of officers of the 65th Regiment at a regular meeting, May 14, 1903, adopted the following:

The members of the 65th Regiment desire to record their sorrow at the death of Herman Mynter, M. D., and extending their sympathy to his family in their affliction; also wish to express their appreciation of him as a citizen, and especially of the splendid service rendered by him to the sick of the 65th Regiment, N. Y. V. I., during the Spanish-American war. They desire to bear witness to the devotion and untiring effort which he gave on the hospital train by which the lives of as many as he could reach were spared.

Resolved, That a copy of this memorial be sent to the family of Doctor Mynter.

SAMUEL M. WELCH, Colonel,
ALBERT H. BRIGGS, Major,
CHARLES E. P. BABCOCK, Major,
HENRY W. BRENDEN, Captain.

I would emphasise two incidents in the life of Dr. Mynter as distinctly revealing the manner of man, those who knew him best knew him to be. Dr. Mynter was the first well known surgeon to reach the bedside of the dying President McKinley. As was his wont he was provided with suitable instruments for immediate use. His mind was also clear as to the only course of procedure for the case. Within a few moments he was joined by several of his colleagues; a brief consultation resulted in an agreement as to what should be done. The usages of his profession, which he knew well, gave him the opportunity and the right to announce in substance, "Very well, gentlemen, such being the case, I will ask you to prepare yourselves to assist me in making this operation, the only possible means of saving the life of the most powerful of the Rulers of Earth." Dr. Mynter was a general surgeon, having had a large experience in abdominal surgery. In the consultation was a surgeon of larger experience in abdominal surgery than Dr. Mynter, from the fact this was the other's

special field, although generally considered a specialist in the diseases of women. To this surgeon, Dr. Mann, with a self-abnegation and courtesy seldom equaled and never surpassed, Dr. Mynter resigned the supreme opportunity of his life. Such a sublime act would have been impossible to any man save one entirely loyal to the highest ideals of our noble art. Few men ever have such a privilege; no man ever made better use of so supreme an opportunity.

It was my sad privilege to visit Dr. Mynter during the closing days of his final illness. Upon entering his chamber on one occasion I remarked, "How well you are looking this morning." His reply to my salutation was characteristic. With a graceful wave of the hand he said, "Of course. Why should I not look well. My good friends and wise physicians tell me I have not long to live. This morning I sent for my spiritual adviser. He left me but a few moments ago. If I am to die I will die as becomes a gentleman and a Christian."

In recalling these incidents I can but reflect that conduct and character after this manner comes only to those whose precious privilege it has been to drink from the sweet waters of life. In conclusion it seems not inappropriate to call to your attention the minutes of the special meeting of this society called to take action upon Dr. Mynter's death, at which the following was adopted:

Forasmuch as it hath pleased Almighty God, in His wise providence, to take out of the world the soul of our deceased brother, Dr. Herman Mynter, we, the Medical Society of the County of Erie, therefore declare and pronounce this estimate and testimonial of his life, work, and character.

Herman Mynter was generously endowed by an honorable ancestry, with rare gifts of mind and person. These gifts, fortunately, had been well developed by his educational training, the best the schools and universities of Europe could give; and when in the days of his early manhood he came to Buffalo to become a loyal and enthusiastic American citizen, and a member of its medical profession, he came not empty handed, but magnificently equipped: not needing care, but ready and able to care for others. During his entire life, as strength and health permitted, he practised his profession, which he ever honored and adorned, with devotion to its highest ideals, and with distinguished success.

Dr. Mynter was a frequent contributor to the literature of medicine, and his contributions ever bore the mark of distinct individuality, unusual mastery of its scientific principles and progress-making originality. His success as a teacher was pronounced, because he ever gave to this portion of his work,—as to all his efforts,—his very best. The monument of this life, more lasting and beautiful than carven granite, or sculptured marble, is his practice—where thousands of human lives have been blest by his intelligent conception of scientific principles and

his skilful application of these principles for the relief of suffering, deformity, and disease.

We loved him and we will cherish his memory, not only for his brilliant professional achievements of mind and hand, but moreover for his record of clean, manly and blameless walk and conversation, the proof of the intrinsic nobility of his character. Therefore

Resolved, That this minute be accepted, inscribed upon our records, and a copy transmitted to the family of our deceased brother.

IN MEMORIAM, WILLIAM H. JACKSON, M. D.

BY ALVIN A. HUBBELL, M. D.

Dr. William H. Jackson closed his eyes in death, at 6 p. m., on November 28, 1903, after an illness of eight days from pneumonia,—that dread disease which, in its fatal ravages, so frequently invades the homes of both high and low, and spreads sorrow and desolation in its path. Already, however, had his constitution been made vulnerable to morbid agents by diabetes mellitus, from which he had suffered, and with which he had courageously, and with more or less success contended, for four years. He was 62 years of age, and was at the zenith of his professional career.

Dr. Jackson's life was marked by various activities. He came from a good family, and first saw the light of day on August 26, 1841, in Clarkson, Monroe County, N. Y., where his parents then lived. While quite young his family moved to Sandusky, N. Y., where he spent his boyhood days. Here he received a common school education, and afterwards attended the State Normal School at Albany, N. Y., from which he graduated in due time. He also took a business course in the Eastman Business College at Poughkeepsie, N. Y. Subsequently his time was divided between teaching in our public schools and business pursuits, until 1869, when, through the influence of his brother, B. F. Jackson, state engineer and surveyor of South Carolina, he went to Columbia, S. C.

In 1863, he was married to Miss Mary Hyde of Sandusky, N. Y., and they resided in that place until she died, in 1870, except that he was south for about a year before her death. After her death, he continued his residence in Columbia, S. C., until 1877. During a part of this time, he was engaged in teaching, being employed as principal of the public schools of that city. There, also, for some time, he was the proprietor and editor of a Republican newspaper, the management of which, during the exciting days of reconstruction after the Civil War, required vast amount of courage as well as good judgment. During the early part of this period, he also found time to study medicine, and graduated from the University of South Carolina,

in 1873. He did not, however, engage in the practice of medicine while living south.

In 1877, he returned north and renewed his studies in medicine, spending a good share of that year in the Buffalo General Hospital. In the meantime, he married Miss Frances Rockwell, of Pike, N. Y., and in 1878, located at Springville, N. Y., for the practice of his profession. He at once obtained a substantial following. During the quarter of a century in which he resided in that town, he became recognised as one of the most prominent physicians and surgeons of Western New York, and was placed in many positions of trust and honor. For fourteen years he was surgeon to the Buffalo, Rochester & Pittsburg R. R., and for many years was a member of the United States pension examining board, of which he was president at the time of his death. He was an enthusiastic Free Mason, and had been admitted to all its degrees as high as the Knights Templar.

He was a member of numerous medical societies, of which the most important were the Medical Society of the County of Erie, New York State Medical Association, American Medical Association, and the National Association of Railroad Surgeons, in some of which he held honored official positions.

Dr. Jackson was quiet and unassuming in his bearing, and yet he had a strong personality. He led a temperate and exemplary life, and was most genial and companionable as a fellow-practitioner and friend. He was a man of sound judgment, and this was reinforced by a high and cultivated intellect. His conscience was sensitive, and his sympathies were tender and deep. In short, his make-up was such that he strikingly illustrated the best type of the time honored family physician,—ever attentive, ever kind, ever ready to supply all available means of relief, even to the calling to his assistance of colleagues who might possibly be able to contribute thereto, whenever difficulties and doubts arose.

Dr. Jackson showed true professional spirit by his dignified and differential intercourse with medical men, by his close affiliations with medical organizations, by his familiarity with the best and most recent literature, and by his occasional resort to clinical centers to witness the new and improved methods of our art. But while he was eager to profit by the experience and suggestions of his fellow practitioners, he was very reticent about urging himself forward and about recording his own experience and opinions for the benefit of others. This is to be regretted, for he had an abundance that would have been helpful and useful. Yet he was always ready to lend a helping hand, and the young physician found in him a true and efficient friend.

To the country practitioner are presented exigencies, emergencies and temptations which put him to the severest test of skill, intelligence and honor. Dr. Jackson was subjected to these tests and was never found lacking. The country practitioner has opportunities for professional growth and intelligence

such as are found in no other field of practice which, if used properly, make him a pillar of strength in our ranks. Dr. Jackson was one of these. The capable, honest, faithful country practitioner has an access to the hearts of the people, and wins from them a confidence, devotion and affection such as nowhere else obtains. Dr. Jackson enjoyed this privilege and reward.

Dr. Jackson left a widow and five children: Mrs. S. R. Shuttleworth, of Buffalo; Dr. W. Heman Jackson (dentist), of Galeton, Pa., and Lucien P. Jackson, of Warren, Pa., by his first wife, and Fletcher R., and Lawrence C. Jackson, by his second wife. Besides these, he leaves two brothers and two sisters. In his death the family loses its dearly beloved, and the community a much esteemed and trusted physician and friend. Sincere sympathy is extended to all.

IN MEMORIAM, HERBERT MICKLE, M. D., C. M.

BY W. SCOTT RENNER, M. D.

Dr. Herbert Mickle, formerly of Buffalo, died at Asheville, N. C., May 22, 1903, of tuberculosis of the lungs, aged 43 years. Dr. Mickle's ill health commenced in an attack of pleurisy which he contracted about 12 or 13 years ago, in the devoted attention to his profession. From that time until the time of his death, he never enjoyed the robust health for which he was admired before that illness. He was born near Guelph, Canada, of Scotch-Canadian parentage and received his academic education at Upper Canada College. He studied medicine at Trinity College, from which institution he received the degree of M. D., C. M., in 1881; after which he went to London, where he devoted himself to the study of surgery and became a member of the Royal College of Surgeons, England, and a licentiate of the Royal College of Physicians, London, in 1883.

Directly after this, Dr. Mickle came to Buffalo and established himself as a surgeon. He was appointed surgeon to the Emergency Hospital, which was at that time located on Michigan Street. Dr. Mickle soon became prominent in the faculty of the Niagara University, in which institution he was appointed in 1885, assistant in surgery; in 1886, lecturer on pathology; in 1888, professor of descriptive and surgical anatomy; in 1891, professor of principles and practice of surgery; in 1896, professor of practice of surgery and clinical surgery, which position he retained until the amalgamation of the Buffalo and Niagara Medical Colleges in 1898, when he became clinical professor in surgery, in the medical department of the University of Buffalo.

Dr. Mickle was recognised as an able teacher of surgery and his ability to teach in this department was supported by a thorough knowledge of anatomy. He was for many years one of the attending surgeons at the Sisters of Charity Hospital and was, until he left Buffalo, one of the consulting surgeons of the

Buffalo General Hospital. He was an able and conservative surgeon. Few of his colleagues were acquainted with his knowledge of the diagnosis of internal diseases, and his ability in this line gave him a prominent place as an insurance examiner. Discouraged and broken down in health, Dr. Mickle tried another field of labor, but he was then, already doomed to die of that dreadful disease, tuberculosis.

Personally, Dr. Mickle was a gentleman of refinement, very popular in the circles of his acquaintanceship and held in the highest esteem by all who knew him for his attractive social qualities and his genial manner.

IN MEMORIAM, BYRON H. DAGGETT, M. D.

BY NELSON W. WILSON, M. D.

The arrogance and the fatefulness of death is seldom made so apparent as in the battle which ended in the passing of Byron H. Daggett from among those who are, to that vast army which has fallen to the embrace of the Great Destroyer.

We, whose daily life brings us into frequent conflict with death, are wont to be looked upon by an unthinking lay mind as careless; that our familiarity with the supreme moment of transformation when the light of the world pales into darkness before the luster of the hereafter, brings us to gaze with impassivity of death. Yet, there is not one who knew him even casually, who did not experience a sense of genuine sorrow when announcement was made of the death of Dr. Daggett. Those of his profession who were so fortunate as to enjoy his intimate friendship in recent years, knew that he was battling even then with a pathologic condition which, though it gave him pain,—agonising, excruciating pain,—that would have warped and twisted a less rugged character into a life of perpetual irritability, was manfully endured, and that he was silently fighting against it with all the valor of a strong and uncomplaining soul. Who knows of the sufferings of this man, the secret sufferings as the days went by? Publicly he spoke of it rarely and then lightly; yet in the privacy of his life he suffered; and, suffering, he hid his agony beneath a smile and went his way among men doing good. If there are those who, misunderstanding him, or viewing him on the surface, bethought him of sharp tongue or biting epigram, they were unfortunate in their lack of cultivation of a broad-minded gentleman, of strong personality, sturdy friendship and fearless character; they saw the fleeting clouds, mayhap, of a pain-storm; they fore-sware to gaze upon the beauties of the rainbow.

Beneath the rugged exterior of this man whom Death has conquered there was a smile and perpetual sunshine for those who sought his friendship; a willing hand for those who sought his aid, and a broad experience and a ripe judgment for those who

sought his advice. His charities and his virtues were manifold and lasting; his faults were as the dew of the morning, forgot in the sunshine of a perfect day. The memory of man sees only the faultless luster, the beauties of the colorfulness of the gem of life; its tiny flaws, if flaws there be, are not for the mind's eye of man. The gem is set in the diadem of Death—a spoil of war.

Dr. Daggett's life was a busy one. No laggard was he. Ever in the forefront of the progress of medicine he did much to upbuild the profession. He kept pace with the world's research, and in spite of his many hospital services, and the confining hours of his private practice, he found time to enrich the literature of the surgery of the genitourinary system by his contributions of original research. Whatever his coworkers in the specialty which he practised may have thought of his methods, they admired his originality and gave him credit for his painstaking labors, and his name appears frequently in the textbooks on genitourinary diseases as the originator of methods of operative procedures and treatments. He devised instruments for urethral work which have become valuable aids in diagnosis and treatment, and the operating table, which bears his name, is ample evidence of his inventive genius. He was a bold surgeon, a gentle physician, a kindly man. Such is his epitaph. It is graven on the tablets of our memory, for he was our friend.

At the conclusion of the memorials, Dr. Wende introduced Dr. Krauss as the new president of the society. Dr. Krauss briefly thanked the members, and adjournment followed.

PROGRESS IN MEDICAL SCIENCE.

Genitourinary and Syphilitic Diseases.¹

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE TECHNIQUE OF PROSTATECTOMY.

NICHOLAS SENN (*American Jour. of Dermatology and Genitourinary Diseases*, September, 1903,) states that the most feasible route by which to attack the diseased prostate has not been definitely settled. The suprapubic method has been deemed the easiest, most efficient and safest, but a large experience and more extended trial has apparently decided in favor of the perineal route. The perineal operation, from the anatomical standpoint, is most rational and will probably stand the test of time and experience.

1. This "copy" was prepared by Dr. Daggett but a short time before his death, is nearly all pen written, and was, in all probability, his last literary work.—EDITOR.

Removal of the enlarged prostate does not always relieve urinary obstruction and infection; it is often necessary to establish free drainage, after the removal of the prostate, in order to successfully combat co-existing complications. All prostates can not be removed by enucleation, and morcellement or piecemeal removal is necessary.

It is the rule of surgery to operate as little as possible in the dark in important anatomical localities. Large prostates in obese subjects are very difficult to reach and to illumine through the perineum, hence there is a great advantage in an incision that will expose the prostate in the freest possible manner to sight and touch and this is best done by combining the median with two lateral incisions. The median incision lays bare the membranous portion of the urethra and the lateral incisions are carried from the lower pole of the incision to a point half way between the anal margin and the tuberosity of the ischium, cutting through the same structures involved in the lateral operation for stone in the bladder. The wound is deepened by blunt instruments and hemorrhage arrested as it occurs. In this way the rectum is detached until the membranous portion of the urethra and the lower segment of the prostate can be seen and felt in the apex of the wound. The wound is dilated and the rectum drawn back by using narrow, flat and deep retractors, thus exposing the urethra and dependent portion of the prostate. The membranous portion of the urethra is opened on a grooved staff, the left index finger passed into the bladder and used as a blunt hook with which to draw the bladder downward and forward, and incise the capsule of the gland transversely; introduce the left index finger into the incision and peel out the left prostatic lobe; reverse the hand and peel out the right lobe. Sometimes this is done easily, other times it is difficult, and at other times it is impossible; avoid violence and recklessness. Enucleation may be facilitated by traction of the gland with forceps. If feeling is impracticable morcellement must be resorted to. The finger in the bladder serves as a valuable retractor and guide. An assistant holds and manipulates the traction forceps while the operator does the cutting with blunt-pointed scissors, well curved on the flat. Enough tissue should be removed to relieve obstruction.

Complete cystotomy should be done for irrigation in complicated cases and is preferable to tearing into the urethra by attempting to do prostatectomy without a perineal cystotomy. Bladder drainage should be continued until the urine becomes normal.

FALLACIES OF CYSTOSCOPY.

SCHMIDT, L. E., (*Chicago Therapeutic Gazette*, November, 1902,) says that overrating and not understanding the defects often discredit a valuable method of diagnosis or treatment. The cystoscope may deceive the observer and lead to wrong conclusions and even cause unwarranted operations.

Morbid conditions are, in a great majority of bladder cases, located about the trigonum and the internal urethral orifice. These parts are often covered by a protruding fold of the urethral mucosa giving the field of view a reddish tinge, which if unrecognised may convey the idea that an inflammation exists here. In order to determine the question the beak of the cystoscope is placed in different positions and the views compared. The position of the ureteral openings varies quite often in distance from the urethral orifice or they may be covered by the orificial folds, and for these reasons they may be overlooked.

Inflammation or edema roughens the surface of the trigonum and obscures the ureteral openings and poking efforts to find them may do damage. If there is doubt as to the locality of the ureteral openings, introduce the finger into the vagina or rectum and press the trigone towards the cystoscopic window and if the orifice is not found watch for the swirl or spurting out of the urine. Methylene blue, given by the mouth, will give the urine a green color by which the ureteral output can be distinguished from the fluid distending the bladder. The presence of pus in the urine renders the examination more difficult. The urethral orifice is very close to the cystoscopic window, which magnifies, and in this way changes the actual appearance to the eye of the observer. To give a normal size and appearance, with the Netze cystoscope, the object should be about 3 cm. from the prism.

The cystoscope shank is rigid, straight and large, which changes the formation and appearance of the orificial tissue. Inspection of the normal urethral orifice through a suprapubic opening affirms this statement. The edematous folds of the internal urethral orifice, magnified through the optical apparatus misleads the observer. These folds appear often in great numbers, they are not transparent and appear to be quite rigid. The polyp, located at the orifice is transparent, very movable, floating in water, and a loop of bloodvessels running through it can be seen.

Preliminary to a Bottini operation the cystoscope is used to decide whether a barrier exists which can be severed with a galvano-cautery blade with probable success. It is of paramount importance that this barrier, bar, or lobe should spring from the

bladder and not from the prostatic urethra. Nodules and lax membrane from the prostatic urethra may be pushed through and over the urethral orifice by the straight tube, and this mass mistaken for a cystic abnormality.

If this error is made galvano-cautery is dangerous and useless, as the prostatic mass draws back into the prostatic urethra, so that the cuts are made in the prostatic urethra and often lead to serious consequences.

It may be demonstrated that the barrier belongs to the bladder by its covering of bladder mucosa, indicating its presence in the bladder before the introduction of the cystoscope; the urethral mass is covered with urethral mucosa. The *bas-fond* behind the barrier must be deep. If the ureteral orifices cannot be seen there is a grave suspicion that the tumor was pushed into the bladder.

In nervous subjects the touch of the instrument causes circumscribed, energetic contraction, which may be mistaken for a trabeculated bladder. In a trabeculated bladder the trabeculation is uniform over the fundus and vertex, and the protrusion of muscular bundles is constant.

Edema bulbosum may be diagnosticated as a malignant tumor. Tumors covered with incrustations may be taken for calculi and calculi imbedded in the mucosa for tumors. Pedunculated tumors, often flattened, may be taken for malignant growths on account of their apparent broad base. Movement of these tumors will reveal their true condition.

Varicosities are sometimes seen in the lateral walls of the bladder and should be recognised. Cystoscopic burns are sometimes taken for idiopathic ulcers. Their location, absence of inflammatory action and quick healing indicate their nature.

The direct view without enlargement by optical apparatus is apt to lead to misconception because it covers a very small area.

GALVANO-CAUSTIC TREATMENT OF PROSTATIC HYPERTROPHY AFTER
BOTTINI.

VOGEL, (*Jour. des Practiciens*, p. 361, 1903,); (*Am. Med.*, Sept. 5, 1903,) reports several cases operated upon with the galvano-cautery, with full and empty bladders. The first, a man 71 years old, died half an hour after operation without any apparent cause. An examination showed the incision very superficial, supposedly due to the cooling of the knife by the borated fluid in the bladder. Second patient operated upon, first with full bladder, without improvement; second time with empty bladder. Death followed in forty-eight hours from peritonitis, caused by a cut

through a fold in the bladder. Vogel recommends operating on a full bladder, distending with air or fluid.

INDICATIONS AND CONTRAINDICATIONS FOR PROSTATECTOMY.

BAZET, L., (*American Med.*, September, 1903,) states that reaction is taking place against prostatectomy, due to indiscriminate operation. In selected cases the operation is indicated, and should be done through a perineal opening. The size and character of the prostate should be determined by combined rectal and abdominal examination, by cystoscopy and the use of the bicondensor sound. The symptoms of only dysuria and nocturnal frequency, with enlarged prostate, do not call for immediate prostatectomy. Acute detention demands prompt relief by prostatectomy, in the presence of enlarged prostate; if small, defer operation. In chronic, incomplete retention operate, if the prostate is large. The larger ratio of failures result from operation in this condition. Contraindications are great age, debility, infection and nephritis.

VARICOCELE.

VARICOCELE, (Editorial *American Med.*, September, 1903,) rarely causes serious atrophy of the testicle or serious impairment of the sexual function. There are three established operative procedures; subcutaneous ligation of the veins; ablation of the dependent portion of the scrotum to shorten the support of the testicle, and open incision. The last is the one usually employed.

The United States army surgeons, according to Thornburgh, (*Boston Medical and Surgical Journal*, August 27, 1903,) describe the suprapubic method of operation as follows: briefly the operation consists in making a 3 cm. incision extending through the skin and deep fascia, whose center is over the external ring of the affected side, parallel to Poupart's ligament. The cord is exposed, the vas dissected free to near the testicle, the latter together with the enlarged and tortuous veins, is brought up into the wound by gentle traction. The veins are ligated in two places with No. 3 cumolised catgut, the intervening segment of veins resected, and the cut ends approximated as in the open scrotal incision. The deep structures and skin wound are approximated with No. 1 cumolised catgut. Thornburgh had slight suppuration in one instance and this he attributed to the use of chromic catgut which was not readily absorbed and caused irritation. In army practice the recruit is operated upon when the varicocele is as large or larger than the testicle of the sound side, otherwise operation is not deemed necessary. The advantages claimed for the suprapubic site are more certainty of dis-

infection, lessened liability to stitch abscess and other infection, more favorable site for the application and retention of an aseptic dressing, and lessened probability of sinus formation.

THE OCULAR MANIFESTATIONS IN CHRONIC BRIGHT'S DISEASE.

DE SCHWEINITZ, (*Med.*, Dec., 1902,) mentions the ocular lesions which may be associated with, or caused by various forms of Bright's disease: (1) complete blindness without ophthalmoscopic lesions, or at least without the presence of lesions more or less suggestive of disease of the kidneys, generally called uremic amaurosis, and most often seen in acute nephritis, but also in acute exacerbations of chronic renal disease; (2) various types of retinitis and neuroretinitis, to which the descriptive term "albuminuric" is commonly applied, and which are most often seen in association with chronic forms of kidney disease; (3) alterations in the caliber and relation to the retinal vessels owing to sclerotic changes in their walls, with or without hemorrhages and exudates in the retina, seen in association with those forms of renal disease in which vascular changes are evident elsewhere in the body: also isolated hemorrhages and exudates, without marked vessel-wall changes; (4) alterations in the uveal tract, particularly in the choroid and iris; (5) some varieties of cataract; (6) paresis and paralysis of the ocular muscles, particularly the superior oblique and the external rectus; (7) recurring subconjunctival hemorrhages.—*International Medical Magazine*, March, 1903.

VARIATIONS IN ALBUMIN, URIC ACID, AND TOTAL ACIDITY IN URINES WITH PERMANENT OR INCONSTANT ALBUMINURIA.

DAREMBERG and MORIEZ (*Revue de Med.*, No. 9, 1902; *Gaz. des Hôp.*, 1902, p. 1,098,) have studied the quantitative variations in certain elements found in the urine and the changes which occur in the total acidity under these conditions. They arrived at the following conclusions:

All albuminurias which occur in patients in fairly good condition either entirely disappear or are at a minimum in the morning. In these different forms the time of maximal elimination of albumin is extremely variable. In the case of permanent albuminuria there is always some albumin found in the urine between noon and 5 p. m. In those who have a morning disappearance the albumin shows itself between 10 a. m. and 10 p. m.: but most frequently between noon and 6 p. m. In inconstant albuminuria there is no particular periodicity in the appearance of the albumin in the cases observed. In that with matutinal absence some are influenced by the digestion, while others are

not; of these the first demand alkalies, the second arsenic. Massage is equally unavailing in both varieties. In the inconstant form the amounts of uric acid, the total acidity, and quantity of albumin are occasionally proportional; sometimes inversely proportional. The differences between the maximum and minimum of uric acid are much greater in albuminuric patients with a morning disappearance than in healthy persons. In healthy individuals the hourly curve of elimination of uric acid and total acidity are concordant. This is not the case in those albuminurics who show the morning absence of albumin. The hours of maximal and minimal elimination of uric acid and degree of acidity are constant in well persons; but very inconstant in those with albuminuric. Patients troubled with albuminuria of the inconstant type may increase in weight, even during a period of augmented amounts of albumin.—*International Medical Magazine*, March, 1903.

THE IMPORTANCE OF HYALIN CASTS IN THE DIAGNOSIS AND PROGNOSIS OF RENAL DISEASES.

DEFENDORF, A. R., (*Yale Med. Jour.*, December, 1902,) says that purely hyalin casts have been found in large percentages in individuals who are apparently healthy and without other evidence of kidney disorder. These percentages increase with the advance of age. This, in the absence of *post-mortem* observations, has led to a more or less general belief that hyalin casts in urine of individuals past 50 are without significance. A series of 48 autopsies in which urine examinations had been made some time previous to death, show that casts were present in 41 cases and chronic nephritis in 46 cases, permitting the inference that hyalin casts in these cases were distinctly an indication of an organic disease of the kidneys. The 5 disease conditions in which hyalin casts exist alone or with finely granular casts are: the atrophic stage of chronic parenchymatous nephritis, chronic interstitial nephritis, chronic diffuse nephritis, senile interstitial nephritis, and chronic passive congestion of the kidneys. The prognosis of these conditions, with the exception of passive congestion, depends as much upon the general clinical condition of the patient, especially in reference to cardiac and vascular disease, as upon the character of the kidney lesion.—*International Medical Magazine*, March, 1903.

THE authorities at Butler, Pa., issued an order December 7, 1903, which will greatly lessen the danger of typhoid fever, and which will to a great extent protect the towns in the valleys below Butler.

ABSTRACTS.

Antisclerosin in Arteriosclerosis.

By DR. S. GOLDSCHMIDT,

Physician Bad Reichenhall.

[*Deutsche Praxis Zeitschrift für praktische Aerzte*, No. 19, 1903.]

During the past few months I have had occasion to employ a remedy for which very good results in arteriosclerosis are claimed and which is called antisclerosin. It is composed of various blood salts and is manufactured by W. Natterer, of Munich, who placed a quantity of it at my disposal. I have tried it altogether in 13 cases. I selected patients with advanced arteriosclerosis, both central,—sclerosis of the heart,—and peripheral. The results show that the remedy is excellent, for its effects were not only symptomatic and temporary, but sometimes also permanent.

CASE I.—A man of 65, with marked sclerosis of heart and arteries. He complained of beating of the temples, *muscæ volitantes*, occasional tinnitus, palpitation, and the like. The action of antisclerosin was very surprising. After taking two tablets three times daily for 10 days all the troublesome phenomena disappeared. The pulse showed a diminution in hardness.

CASE II.—Aged 50. Very advanced sclerosis and arrhythmia of the heart; occasional pseudoasthmatic attacks. Antisclerosin, same dose. Returned home after 14 days. Condition has remained satisfactory.

CASE III.—Patient confined to bed. Pulse extraordinarily hard and slow, 60 to the minute. Heart enlarged in all dimensions; tone on auscultation, loud and ragged. Loud murmurs at all the orifices and edema of feet. Diuresis small; no albumin. Moderate emphysema with a little catarrh. Digitalis. Eight days later, in somewhat better condition; antisclerosin. One week later edema of the feet had disappeared, dyspnea had gone and patient got up. Now feels very well under antisclerosin and CO₂ baths. Cardiac murmurs remain. Heart configuration unchanged.

CASE IV.—Widow of 68. Central and peripheral sclerosis, cardiac palpitation and rheumatoid pains. Antisclerosin for 10 days. Marked improvement in palpitation. Objectively no change was noticeable.

CASE V.—Countess M., 61. Suffered for many years from arrhythmia and far advanced sclerosis of the heart and arteries; edema of the lower extremities. Stenocardiac attacks. Septem-

ber 10, antisclerosin. On the 15th she had a fainting spell lasting for several minutes. When she regained consciousness amnesic aphasia had appeared. The question: had the apoplexy any connection with the antisclerosin? I can positively answer in the negative. On the 18th the patient indicated pains in the head and the heart. Antisclerosin, which had been stopped for 3 days, resumed. Two days later the heart became quieter. Arrhythmia was noticeably less, the cardiac contractions were much more regular and the pains had disappeared. Ice bag and the Leiter apparatus had been used in addition to antisclerosin. No more complaints of stenocardia. The cerebral trouble is slowly improving.

The other eight cases present a similar history and need not be reported.

In all cases the dose was 2 tablets thrice daily, an hour before meals or with meals. The former method should be used if the latter does not give results. Diet consisted mostly of vegetables with little or no alcohol. All kinds of baths were given.

The favorable effects were doubtless due to antisclerosin. In some few cases the iodine preparations might have done as well, but would have been slower in action. Iodine has, besides, unpleasant by-effects which prevent its use in very many cases. There were no such idiosyncratic phenomena with antisclerosin.

Suppurating Appendicitis Opening Into the Bladder.

By DR. ENRIQUE FORTUN,
Surgeon of Hospital No. 1, Havana.

[From *Revista Medica Cubana*, July, 1903.]

Juan G., a Spanish merchant, 37 years old, with evident syphilitic antecedents, began to suffer about two months ago from acute pains in the right iliac pit, while a tumefaction was observed in that region. He became an inmate of a clinic of this city, where his case was diagnosticated as malignant neoplasm. After remaining about 20 days, the patient decided to leave for Spain, and went to a hotel here. He was there taken with violent fever and ague, a temperature 41 degrees C., and the first micturition following this attack showed the presence of a great quantity of pus.

Dr. Parra, who was attending the patient, asked me to assist him. The first symptom to which my attention was called was the dimension and hardness of the liver, with swellings, the massiveness of which continued uninterrupted in connection with that in the iliac pit, in which latter region, an accentuated muscular resistance was observed, though presenting a depressed area at the bottom of which the rim of the hepatic gland could be felt.

Temperature was 38 degrees, pulse between 80 and 90, and the general condition of the patient was rather satisfactory.

The diagnosis offered no doubt in our opinion: suppurating appendicitis with evacuation into the bladder; the urine was extremely fetid and mingled, and it contained a large quantity of pus; coexisting syphilitic cirrhosis of the liver was also a part of the diagnosis. On the following day an incision of about 7 cm. long was made into the middle of the depression observed in the iliac pit. We rapidly reached a perfectly defined cavity, which contained a little pus mixed with mucosities. We washed out the cavity with hydrozone and packed it with iodoform gauze. I dressed the wound the following day. We did not find any connection with the bladder, but we did find the appendix and fecal matter.

A complete cure was accomplished in a month, and during that time the liver decreased considerably in volume. Since the third day after the operation antisiphilitic treatment has been followed. The communication between the abscess cavity and the bladder healed after 12 days of treatment.

Adrenalin in Cardiac Toxemia of Pneumonia.

HENRY L. ELSNER, Syracuse, N. Y., (*New York Medical Journal*, January 2, 1904,) directs attention to the appalling mortality of pneumonia due to the resulting cardiac toxemia. The prime factor in this disease is a toxemia with obstruction in the pulmonary circuit, leading to cardiac asthenia. Marked changes occur in the right half of the heart, with far-reaching degenerative changes in the muscle, heart-clots, and vasomotor paralysis.

Three remedies meet the indications presented by the circulatory changes due to paralysis of the vasomotor centers, the dilated condition of the arteries and the weakened heart. These are strychnine, digitalis, and suprarenal extract, or adrenalin, its active principle. Adrenalin acts on the heart and bloodvessels favorably; it does not act on the vasomotor center. Hence, it may be used to assist strychnine. When the vasomotor center is exhausted and blood-pressure study proves the inefficiency of strychnine, adrenalin may still be administered, and, in some cases which seem unpromising, when combined with the method of stimulation about to be suggested, the patient may be carried beyond the critical period to a safe recovery. Suprarenal extract, or adrenalin, has seemed to the author to act as a needed food in all infections where there is danger of myocardial degeneration. He reports a case of pneumonia, in a woman, the mother of five children, in whom it had been impossible to raise a continually lowering blood pressure with strychnine. The

systolic blood pressure was almost immediately raised by the repeated administration at short intervals of fifteen minims of a 1 to 1,000 solution of adrenalin hypodermatically, and the patient recovered.

IRITIS.

In conjunction with local treatment:

R	Kalo iodid	3 drms.
	Tongaline.....	8 ozs.

M. et ft. sol. Sig.—A teaspoonful four times daily.

CORRESPONDENCE.

Editor Buffalo Medical Journal:

SIR:—Owing to the fact that some physicians of Buffalo, who are friends of mine, have stated to me that there is a feeling among some Buffalo physicians that my institution has not been conducted on a strictly ethical basis, I would like, therefore, through the medium of your journal to inform these physicians that it is the spirit and intention of this institution to be strictly ethical and regular.

I have no secrets; my methods of treating asthma are open to all physicians and they are invited to inspect the same.

GEO. N. JACK,

Buffalo, N. Y., Jan. 12, 1904.

261 Georgia St.

TOPICS OF PUBLIC INTEREST.

THE OPTOMETRY BILL ONCE MORE.

ITS PERNICIOUS FEATURES—PHYSICIANS SHOULD SUPPORT THE COMMITTEE IN EFFORTS TO DEFEAT IT—A STIRRING APPEAL.

MEDICAL SOCIETY OF THE STATE OF NEW YORK, }
OFFICE OF THE COMMITTEE ON LEGISLATION. }

To the Medical Profession of the State of New York:

An optical society, composed of so-called "refracting opticians," has issued a circular letter to the medical profession, asking for the indorsement of a bill about to be introduced in the legislature, legalising the "practice of optometry."

This measure is not a new thing; we have met it several times in the past, and it has only been necessary to expose its

pernicious features to defeat it. It will be necessary to do this again and again, until the public awakens to the fact that measures such as this are only the efforts of incompetent people to evade the medical laws, in order that they may prey upon the community without fear of molestation, and then suitable provisions will be made to suppress them.

It is to be hoped that members of the medical profession will not be influenced by the specious arguments of these opticians to give them any encouragement or indorsement; for any success they may attain will be the signal for a host of osteopaths and other similar sects to ask for similar privileges. There are no good reasons why opticians should be granted any special privileges. They undertake to do a work which they are not in any way qualified to perform, and there is no doubt, in the minds of those who are competent to judge, that they do incalculable harm and injury. They, in common with all others who treat physical defects and infirmities, should have a medical education before they are allowed to pose before the public as competent to do the work they pretend to be able to do. It cannot be expected that future physicians will be willing to undertake a course of studies to prepare themselves for the work of caring for the sick and physically defective, if, after having fulfilled all the legal requirements, they find themselves obliged to compete with others who have received almost identical rights and privileges with practically no preparation. If medical laws are necessary to the proper protection of the community, they should apply equally to all who make a business of advising or treating people, regardless of the disease or defect from which they suffer, or of the methods or measures employed. It is impossible for the state to discriminate between physicians, opticians, and the various "pathies" without injury to the cause of professional elevation. A single standard must be created for all, and with its requirements all should comply.

The committee on legislation of the Medical Society of the State of New York has fought these legislative battles successfully in the past and will continue to do so if the profession will support it as heretofore it always has done. The members of the legislature have no knowledge of the merits of this and similar measures, and look to the medical profession for advice and guidance. The legislature is made up of fair-minded, intelligent, and loyal citizens; and when pernicious laws affecting the public health are enacted, it is, as a rule, because of the neglect of citizens who are not members of the legislature to do their duty. We urge the members of the medical profession resolutely to oppose this "optometry bill." If it does so the defeat of the bill is assured.

(Signed)

FRANK VAN FLEET,

Chairman, Committee on Legislation,
Medical Society of the State of New York.

A PLEA FOR UNIFICATION AND UNIFORM ORGANISATION.

By J. N. McCORMACK, M. D., Bowling Green, Ky.

Chairman of the Committee on Organisation of the American Medical Association.

To the Medical Profession of the State of New York:

After correspondence on the subject with members of the joint conference committee, and others, more especially on the society side, I have been requested, as chairman of the committee which has had this work in charge from its inception, to prepare for publication an explanation of the plan of organisation for state and county societies which has been so generally adopted in the last two or three years. As the plan was prepared and is recommended for universal adoption, is already in satisfactory operation in 32 states and in over 1,500 counties, and is likely to be adopted in nearly all of the other states as soon as their annual meetings occur, as the subject is one of interest at this time to every member and well wisher of our profession, and, more especially, as the preparation of the plan for general adoption, makes my committee as responsible to you for anything wrong in it as though we were members of your county and state societies, it seems entirely proper that the request should be complied with, and an attempt will be made to place beyond question the truth of the following propositions:

1. That existing professional conditions and estrangements are useless and senseless, that they are hurtful almost beyond calculation to both the profession and the public welfare, and that they are remediable.

2. That the plan of organisation is based upon our system of civil government, that it was prepared with much care and unselfishness, and that it contains nothing untried, experimental or impracticable.

3. That the county society is not only the unit of the organisation, but the source of all authority and power in both the state and national bodies through a representative delegate system, and it is also the only portal of entry to the entire society system.

4. That coincident membership has been an old and perfectly satisfactory method in many states, is essential to complete organisation, and that it is just and right. It would be as unfair to permit a physician to become a member of his county society and enjoy all the benefits arising from the labors of the state society, as to permit one to become a citizen of Ithaca or Troy, without becoming a citizen of the state of New York and bearing the burdens and responsibilities of the same.

5. That amendment of any part of the plan is purposely made easy and is controlled by delegates from, and responsible alone to, the county societies.

6. That the time has come for unification, and that, while

union under a defective plan, which the joint body could modify and improve for the common good, would be far preferable to a continuation of existing conditions, the one now proposed has been found excellent and practical after full trial in other states, and, having been prepared away from New York contentions and controversies, it offers a basis for compromise honorable alike to both factions and to neutrals.

In order to establish these propositions clearly and satisfactorily, a brief history of this reorganisation movement is necessary. From the very outset the magnitude of our task grew upon us. Although in name medical societies—city, district, state and national—existed without number, and medical machinery and high-sounding official titles were provided sufficient for the civilised world, membership in most of them was small and little more than nominal, and, outside of a few states and localities, the profession was so torn with dissensions that it was in chronic disgrace in its own and the public estimation, and in a large measure robbed of its power, by legislation or otherwise, to help either itself or the public, for whose benefit it was supposed to exist. Into a profession already so overcrowded that there was less room and remuneration for the average man than for clerks and skilled laborers, commercial medical colleges were annually turning loose thousands of new graduates, many poorly equipped for intelligent modern practice, and all of them without an hour's training in professional conduct, business methods, or the importance of society membership, in which all should have been drilled with the care due to subjects to become of so much importance as soon as they come to serve the public, and face the problem of earning an honorable livelihood.

As a result, largely, of such lack of training, we found that of the 120,000 registered physicians in this country, only about 30,000, one in four, had ever been members of any kind of society, local, state or national. Most cities were little better organised than the country districts, a large submerged element being often found within an easy walk of imposing medical and post-graduate schools, libraries and hospitals, who had long lost hope of advancement, looked upon their profession only as a doubtful means of support, while those in the higher ranks wrangled and slandered one another, and brought odium on all, and christian science and other forms of bald, naked quackery, took the cream of a patronage which a united, self-respecting and honored profession would have deserved and received.

It was soon found, however, that these conditions, deplorable alike to the profession and public, were not universal. In Alabama, for instance, under a model plan of organisation there resulted a united profession, with over 1,500 of the 1,700 physicians members of the county and state societies. Medical opinion was sought for the guidance of law-makers, executives and courts, the profession was honored and independent, and quackery was unknown. Kentucky, striving for the same ends under less per-

fect methods, had had no itinerant or advertising doctor within her borders for ten years, and the profession was aspiring to its rightful place as a directing force in public affairs. In a dozen cities also, usually of the lesser rank in population, under similar influences, harmony, coöperation, and measureable prosperity prevailed, and was increasing.

Inquiry soon demonstrated that the personnel of the profession was much the same everywhere, and the difference in the conditions found were apparently entirely due to difference in methods of organisation. After all proper allowance for personal equation in rulers, governments are liberal or despotic as determined by their organic laws, and, probably quite as much as with a nation, the constitution and by-laws of a medical society will set the compass and shape the policy which will largely determine the future for both itself and its individual members.

Influenced by such belief and considerations, my committee began its work four years ago by grouping these provisions for state and local societies which had resulted in the most effective organisations, and with great care made our first draft of a constitution and by-laws for submission to, and discussion by, conferences of leading men in the various medical centers where there was a reasonable degree of harmony. Later the improved draft was published in the medical press and in pamphlet form and given the widest possible publicity. As we were performing an important, unselfish and gratuitous public service for the common good, advice and frank criticism were cordially asked from all, and these came freely and helpfully, especially from the better organised states and cities.

With such assistance, and in the light of such criticism, keeping always in mind that the plan should be democratic and conform to our methods of civil government, with local self-government by the county societies as the central idea, a simple but comprehensive system was gradually evolved, almost ideal in its outline and possibilities, which, after full trial under the most diverse professional conditions, has proven entirely practical. It is so flexible that it can be as easily adapted to the Cook County Medical Society at Chicago, with 1,800 members, as to the sparsely settled counties in North Carolina or California with ten members. Under its operations in one year in Michigan the membership increased from 560 to 2,100; in Kentucky, from 390 to 1,600; in Tennessee, from 300 to, over 1,000; in Missouri, from 400 to 1,500; in Arkansas, from 190 to 703, and in like proportion in every other state adopting it.

It is a thoroughly democratic and American plan, using these much abused terms in their broadest and best sense. As has been said, the county society is made the broad foundation and source of authority for everything, as well as the portal of entry to both the state and national bodies. If a physician stands well enough at home to secure membership in his county society, he is eligible for membership and for any position of honor or trust in the

state and national bodies, and, if he loses membership at home, subject to the right of appeal, he loses out everywhere.

The house of delegates, the legislative and business body of the state society, like the general assembly of a state, is composed of representatives from the county and district societies, and such delegates are freed from political influence so far as possible by making them ineligible for any of the offices within their gift, and they are responsible alone to the constituencies electing them. As they are in session but two or three days, in order to make the transaction of any business possible, unlike senators and representatives, they sit as one body. This gives a body small enough for deliberative work, and yet gives county societies remote from the place of meeting, and all others, an equal and only an equal, voice in all business affairs, if only the delegates are in attendance.

Carrying out the same principle of local self-government, this house of delegates, made up directly from county and district societies, elects from the general membership the delegates who, in turn, compose the legislative body of the American Medical Association. As in the house of delegates of state societies, this being a small body, with its members carefully selected and made ineligible for any other position, with the terms of half the members expiring each year, so as always to have men of experience in it, and which can remain in session, if necessary, after the general meeting adjourns, it was hoped to provide a body in which the interest of the profession and of scientific medicine might be considered and promoted in the broadest way.

The question of coincident membership in county and state societies is one which should require little explanation in New York. It has given satisfaction in the association, and has, of course, been under the observation of the society people. You have also had ample opportunity to observe the results of it in the neighboring states of New Jersey and Connecticut, where it has been in operation for years. It has been long the practice in Alabama, with the result that about 90 per cent. of the profession are permanent members, as well as in Massachusetts, Pennsylvania and Indiana, and recently in a total of thirty-two states. It is only one feature of the work, but it is so important that any complete or systematic organisation of the profession is impossible without it. Besides, the justice of it is beyond question. It would be as obviously unfair to permit one to join his county society and enjoy all the benefits of the state society, arising from its legislative, educational, and other expensive and responsible labors, without assisting in its support, as it would be to permit a man, if one could be found so foolish and selfish as to ask it, to become a citizen of Buffalo, Syracuse or Rochester, and enjoy all the benefits and protection of the state government, without becoming a citizen of New York.

It is true that in nearly every state where this plan of organisation has been proposed, as was natural and to be expected, academic and purely theoretical objections have been made to some

feature of it, usually to the council, the house of delegates, or to coincident membership. Such objection has always been made in advance of a trial of them, and they have been confined almost entirely to states which have been practically without organisation heretofore. Conditions in Iowa illustrate this point well. The county society at Dubuque, which has reorganised and applied for a charter within the last ten days, raised many such theoretical objections to the plan before they had tried it, while 88 counties in the same state, organised under it, and realising its practical benefits, are loud in praise of the very provisions to which their worthy neighbor at first objected. It is a source of much encouragement that this has been the experience of over 1,500 counties which have reorganised.

It would be pleasant to comment on each provision of the plan in detail if space permitted. Suffice to say that it was intended only as the foundation and frame work for a broad and comprehensive system to be recommended for universal adoption, that nothing was included except for what appeared the best of reasons, and that it is susceptible of infinite elaboration and improvement in detail as the profession of any state or county develops under the catholic and coöperative spirit which it inculcates, and which is so much to be desired.

Attention is called to the fact also, that much contained in the by-laws, where a wide departure is made from the brevity and compactness of expression adhered to in the constitution, is suggestive and educational in character, much of which would not be necessary if such an organisation as is contemplated was already in existence. We thought it as important, under existing conditions of discord and demoralisation, to furnish incentives to this work, to give practical and detailed information as to how it was to be done, and to put the reasons for it all within easy reach of those whose duty it would be to discuss the subject and do the work as to furnish the framework of which, as the result of years of devoted labor, they were to make a complete edifice occupied by a united and harmonious, or at least a decently coöperative and self-respecting profession. For many reasons, too, amendment to the plan is purposely made easy. If after trial in any state anything is found obsolete or impracticable, it can be easily eliminated or replaced by something better adapted to existing needs, by the house of delegates, subject to instruction from the county societies, at any regular meeting, after such amendment has lain upon the table for one day.

Unification in New York has been so long the dream and hope of its own profession, as well as of the entire country, that now, when this seems about to be realised, it may be that a majority of you will consider mere methods and details of organisation important only in so far as they are likely to hasten or delay the union. In part, this view of the matter is both natural and correct. A cordial union under a defective plan, which could be modified and improved to meet the needs of the joint body, when

there would be unity of purpose and interest for the common good, would certainly be far better than to perpetuate the two bodies, even with model organisations for both, with the strife, discord and loss of public respect inseparable from such conditions anywhere.

Still, if it can be shown, as the writer believes will appear upon the most critical investigation of what is now proposed, that it furnishes ready to your hands a plan of organisation to which you may build and add with confidence in the results, and which will at the same time hasten unification by furnishing a basis of compromise between factions so long divided that suspicion and jealousy have become so much mental habits that neither will be willing to accept what the other proposes, it should, and I am sure will, receive respectful consideration at your hands.

In the era of good feeling and enthusiasm which must follow unification, under such a broad, liberal and comprehensive plan, which would give an equal voice and power to the individual doctor in every county, organisation should and would make rapid strides, and the possibilities opened up to your profession, and then to your people, would be almost beyond conception. In the face of such possibilities, standing upon the threshold of such accomplishments, petty prejudices and personal interests appear so insignificant that they should find no place in large minds.

Then, as New York would be in perfect alignment with her sister states, with proper education and effort, everything desirable would, in time, be brought within reach of the united profession of the entire union. The complex and difficult problems before the profession of this country incident to our unprecedented advance in population and civilisation, and which must be solved by it, if they are to be solved, will tax its highest intelligence and energies at its best. Provision can then be made for continuous scientific research, and for systematic collective investigation into the causes and prevention of diseases, upon the large, generous lines demanded by the vast interests involved. The vexed problem of medical education can then be taken up with confidence and justly and wisely solved. Reciprocity in licensure and membership between states can then be discussed from the standpoint of the common good and settled upon some equitable basis. Constructive statesmanship can be substituted for the narrow, time-serving political methods of the present in municipal, state and national public health affairs, and our great profession, great even now in spite of its divisions, united, elevated and ennobled, would come to occupy its rightful place as one of the greatest of modern forces for the guidance and protection of our people. It would be an honor, even to New York, to lead in a reform promising such results, and to set an example in complete organisation, which less favored and weaker states would imitate with both pride and profit. First of all, leading to all and above all, in the words of your victorious commander, greater in magnanimity even than in war, "Let us have peace."

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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No. 7

Unification Still Nearer.

IN the issue of this journal for November, 1903, we printed an editorial article, giving a summary of the various steps taken during the past few years by the Medical Society of the State of New York, in the attempt to secure a unification of the profession through consolidation of the two leading state medical organisations,—the society and the association. The article referred to closed with the prediction that unification of the medical profession in the Empire State would be an accomplished fact by the time the Medical Society of the State of New York held its annual meeting in 1904. Some of the friends of the JOURNAL thought at the time this was an extravagant statement, because it would be a physical impossibility to bring this about so soon. We may explain that we did not intend to carry the idea that all the statutory requirements would be met and that the two bodies would be so soon amalgamated and operating under one head, with all the details of the consolidation working as a unit. What we did believe, and this we intended to convey, was that all would be arranged as far as committees could determine, that the plan for coalition would be reported to the society at the meeting referred to, and that the society in annual session assembled would pass upon the treaty.

If, then, this prophecy has not proved quite true, it has come very close to truth, for, according to the published reports in the weekly journals of January 16, 1904, a permission bill has been agreed upon. It was introduced in the senate, January 13, and at this writing (January 21) we are informed the bill has passed that body.¹ It is now in the assembly and will, no doubt, be dealt with by that house at an early day. Furthermore, a protocol

1. It has since passed the assembly and will become a law before the JOURNAL reaches the mails.

has been agreed upon by the commissioners to be submitted to the respective bodies, which it is believed will receive unanimous indorsement.

In order to present a historical record of the subject, we print the protocol and bill as an addendum to this article, both of which, probably, will become a part of the consolidation measures before this JOURNAL reaches our readers. We also print elsewhere an address to the medical profession of New York, by Dr. J. N. McCormack, of Kentucky, on the subject of medical organisation. Dr. McCormack is charged by the American Medical Association with the duty of promoting organisation where it does not exist, and of perfecting it wherever it is imperfect or inadequate. He makes an essential point when he declares the county society to be the unit whence all authority is derived. This, however, is not new in New York, where the method has prevailed for nearly a century.

As one of the earlier advocates of coalition, the editor of the JOURNAL feels a supreme satisfaction in the contemplation that a solution of this difficult question is so near at hand. It has presented many vexations features and has subjected men to criticism and misjudgment by their confrères. Upon the general question of union there can be little difference of opinion; upon the details, however, it is but natural that men should differ. Humanity is so constituted that all cannot view the same side of the shield at one and the same time, or in the same light. These differences, however, should not engender animosities or provoke discourtesies. The well formed opinion of every interested member is entitled to courteous consideration; every member is entitled to offer his opinion for what it is worth and, furthermore, such opinion is entitled to receive respectful consideration from those whose duty it may be to listen to him.

Over and above all, however, naturally will be considered the result attained. The bickerings, heartburnings, trials and physical strain will all disappear under the soothing influence of a reunited profession. In one solid phalanx it must now move forward, seeking to create the greatest scientific advancement the world has ever known; and in this laudable purpose no prouder part will be taken by the profession of medicine anywhere than in the Empire State.

PLAN FOR AMALGAMATION.

New York, January 12, 1904.

The subcommittee of the joint committee on conference presents the following plan of consolidation of the Medical Society of the State of New York and the New York State Medical

Association for the information of the medical profession of this state.

The plan is the result of much labor, legal investigation, and careful thought and attention on the part of the committee; and the organisation recommended for the consolidated corporation is one which is now in successful operation in thirty-two states of the United States. It is based upon the form of government of the United States, and care has been taken not to interfere in any way with the autonomy of county organisations, or with their property or other vested rights.

We respectfully urge the members of the profession to promote by all proper means the passage by the legislature of the proposed act prepared by counsel for the committee, authorising the consolidation of the Medical Society of the State of New York and the New York State Medical Association. The proposed act will be introduced in the assembly or senate in due course, and, if passed, will authorise the consolidation upon terms to be agreed upon by the two corporations. The consolidated corporation will be known as the Medical Society of the State of New York.

Before the agreement for consolidation under the proposed act will become operative or effective for any purpose, it must be authorised or ratified by the vote of each corporation at an annual meeting, or else at a special meeting of each corporation called to vote upon the agreement, and it must also be approved by the county medical societies in affiliation with the Medical Society of the State of New York.

The agreement to be recommended by the committee for adoption in accordance with the terms of the act will contain provisions for giving effect to the following stipulations:

1. All assets and liabilities of the New York State Medical Association shall be transferred to and vested in and assumed by the Medical Society of the State of New York at the time of consolidation.

2. Expert accountants shall be employed to ascertain the assets and liabilities of each corporation, and their reports shall be submitted with the agreement for consolidation.

3. All members of the New York State Medical Association in good standing at the time of the consolidation shall be admitted to membership in the Medical Society of the State of New York.

4. All members in good standing of the county medical societies now in affiliation with the Medical Society of the State of New York shall be admitted to membership in the Medical Society of the State of New York.

5. All members in good standing of the New York State Medical Association shall be admitted to membership in the county medical societies for the counties in which they respectively reside.

6. All members in good standing of the Medical Society of the State of New York shall be admitted to membership in the county medical societies for the counties in which they respectively reside.

7. The plan of organization, constitution and by-laws of the New York State Medical Association, with such modifications as have been agreed upon by the committee, shall be adopted as the plan of organisation, constitution and by-laws of the Medical Society of the State of New York.

8. The following proposition shall be submitted by referendum to the vote of the members of the consolidated corporation, namely:

"The principles of medical ethics of the American Medical Association, being suggestive and advisory, shall be the guide of members in their relations to each other and to the public."

9. The Medical Society of the State of New York will petition the legislature for the passage of such further enabling act as may be necessary, if any, to carry the consolidation agreement into effect.

AN ACT

TO AUTHORISE THE CONSOLIDATION OF THE MEDICAL SOCIETY OF
THE STATE OF NEW YORK AND THE NEW YORK STATE
MEDICAL ASSOCIATION.

The people of the state of New York, represented in senate and assembly, do enact as follows:

Section 1. The Medical Society of the State of New York, incorporated by or pursuant to chapter one hundred and thirty-eight of the laws of eighteen hundred and six, entitled, "an act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this state," and continued by chapter ninety-four of the revised laws of eighteen hundred and thirteen, passed April tenth, eighteen hundred and thirteen, entitled, "an act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this state," and the New York State Medical Association, incorporated under chapter four hundred and fifty-two of the laws of nineteen hundred, may enter into an agreement for the consolidation of such corporations, setting forth the terms and conditions of the consolidation and the mode of carrying the same into effect.

Each corporation, party to the agreement, may petition the Supreme Court for an order consolidating the corporations, setting forth in such petition the agreement for consolidation and a statement of all its property and liabilities and the amount and sources of its annual income. Before the presentation of the petition to the court, the agreement must be approved by a majority of the vote lawfully cast at an annual meeting of each corporation, separately, or at a meeting of each corporation separ-

ately and specially called pursuant to its by-laws for that purpose, and a certificate of such approval, verified by the president and secretary of the meeting shall be annexed to the petition.

On presentation of the petition, the certificate of approval and the consolidation agreement, and on such notice to interested parties as the court may prescribe, and after hearing such interested parties as desire to be heard, the court may make an order for the consolidation of the corporations on such terms and conditions as it may prescribe.

When the order is made and duly entered, the corporations, parties to the agreement, shall be one corporation under the name "Medical Society of the State of New York," which shall not be deemed to be a new corporation, but to be a continuation of the Medical Society of the State of New York, incorporated in eight hundred and six. A certified copy of said order shall be filed in the office of the secretary of state. All the property belonging to the corporations so consolidated shall vest in the said Medical Society of the State of New York, which shall have all the powers, rights and privileges possessed by either corporation at or immediately prior to the consolidation, and which shall be subject to all of the liabilities of each corporation.

Sec. 2. This act shall take effect immediately.

Respectfully submitted,

A. JACOBI,
GEORGE RYERSON FOWLER,
E. ELIOT HARRIS.

Albany Medical Annals's Jubilee.

THE *Albany Medical Annals* for January, 1904, is a jubilee number, consisting of 208 pages and contains 18 original articles besides editorial material, reviews, society proceedings, public health items, medical news and a synopsis of current literature, embracing the principal topics in medicine, including the specialties. The first communication relates to the *Medical Annals* and is an autobiographical sketch, prepared by Frederic C. Curtis and Willis G. Tucker. The second contribution, entitled Four cases of gangrene, is by Albert Vander Veer and Edgar A. Vander Veer, and is illustrated with four beautiful plates in colors. Other articles are Lipoma of the intestine, by Samuel B. Ward; Myasthenia gravis, by Henry Hun, George Blumer, and George L. Streeter; Acute ascending paralysis of the type of Landry, by Hermon C. Gordinier; A consideration of the efficacy of antitoxin in the treatment of diphtheria, by Joseph D. Craig; Nervous dyspepsia, by Andrew MacFarlane; The Islands of Langerhans in congenital syphilitic pancreatitis, by Richard Mills Pearce; A study of

the changes occurring in the endometrium during the menstrual cycle, by H. Judson Lipes; The pathology and treatment of tetanus, with a report of three cases, by Arthur W. Elting; A plea for rational administration of chloroform as a routine measure in labor, by Spencer L. Dawes; the etiology and diagnosis of ozena and its relation to pulmonary tuberculosis, by Clement Theisen; Starch digestion in infancy, by Henry Larned Keith Shaw; The etiology of the summer diarrheas of children and of dysentery of bacterial origin, by Herbert D. Pease and Henry L. K. Shaw; Cysts of the mesentery, by Alvah H. Traver. The articles of Drs. Hun, Gordinier, Pearce, Lipes, Traver, and Root are illustrated.

The *Annals* begins its twenty-fifth year most auspiciously and publishes by far the most important single number of a medical magazine that we have yet seen, whether viewed from its scientific worth, literary excellence, or typographical beauty; and we desire to congratulate the editors as well as the publishers upon their enterprise and success.

THE advent of smallpox into a great city is always a menace. It becomes specially so in the present day when methods of intercommunication are so convenient and transit is so rapid. Travelers in large numbers pass to and fro on the great railway lines, many of whom are unprotected by vaccination and all of whom are liable to exposure from cases of walking smallpox. Trolley lines are especially dangerous as carriers of infection. These general observations are made at this time, because smallpox has made its appearance in Buffalo within the last few weeks, happily, however, only to a very limited extent. It is a preventable disease and the health department is amply competent to control the malady and stamp it out with promptitude, provided the necessary machinery is supplied by the common council. The health commissioner should be given all the inspectors and fumigators needed and the ordinances should be so constructed as to absolutely empower him with full authority to take prompt action in the face of menacing contagion. There is no economy in a parsimonious administration at such a time, and a certain autocratic power should be bestowed upon the department of health.

A NUMBER of congresses on tuberculosis have been announced in the medical journals. There is some danger that this subject will be overworked, unless the medical profession differentiates the proper scientific body to which it will give allegiance and sets to work to make the one selected representative in character. Dr.

S. A. Knopf, of New York, recently has sent out an open letter which has been published in the journals, discussing the subject in a calm and judicial manner. At a meeting scheduled to be held in Baltimore, January 25, 1904, under the auspices of the Maryland Tuberculosis Commission, it may be expected that some action will be taken, looking toward a settlement of the rival claims to recognition on the part of the several congress organisations. It appears reasonable to expect that the congress headed by Dr. Daniel Lewis, of New York, as president, scheduled to be held at Washington, April 4-6, 1905, is the one entitled to receive the support of the medical profession and of scientific workers throughout the country.

LAST month we made editorial comment on the libel suit referred to in the following paragraph taken from the *Medical Times and Hospital Gazette* (London), December 19, 1903, which will prove of interest to all sympathisers of Dr. Bayliss.

Among other advantages to the cause of vivisection which have arisen out of the recent case of Bayliss vs. Coleridge is the fact that Messrs. Hempsons, the solicitors for Dr. W. M. Bayliss, have obtained from the publisher of a book called, *The shambles of science*, an apology for the libellous matters contained therein, and an undertaking that it shall be withdrawn from circulation and all copies handed over to the plaintiff's solicitors. We trust that this fact may obtain every possible publicity. The book in question is by Lizzy Lind Af. Hageby, and Leisa K. Schartau. The anti-vivisectionists just at present are having troublous times, and probably the last drop which makes their cup of bitterness to overflow is the news that a gentleman who desires to remain anonymous has, through Professor Starling, presented the sum of £50,000 to University College to be applied to the promotion of higher scientific education and research. Meanwhile, correspondence on the subject in certain daily papers is brisk, but up to the present no denial has appeared from Mr. Coleridge as to the rumor that someone else has paid his costs.

THE optometry bill is again in evidence, this time in a most seductive manner. Elsewhere will be found an address to the profession by Dr. Frank Van Fleet, chairman of the committee on legislation of the Medical Society of the State of New York. The following will be read with interest, and should reach the eye of senators and assemblymen at Albany:

At a meeting of the Buffalo Academy of Medicine, held January 18, the following resolutions were unanimously adopted:

WHEREAS, Certain persons in this state have sent to physicians a copy of a proposed bill which will give to opticians official

recognition by the board of regents, and other rights and privileges which belong to those who have completed the study of medicine as already prescribed by law, and

WHEREAS, In certain cases at least, very decided harm can be done to patients unless the person who prescribes glasses for them has a knowledge of medicine as well as optics, and

WHEREAS, The general proposition in the bill now proposed has already been condemned by the Medical Society of the State of New York, therefore

Resolved, That the Buffalo Academy of Medicine is unalterably opposed to giving the privilege of the practice of medicine to any persons not qualified for this responsibility by a knowledge of the fundamentals of medicine to-wit, anatomy, physiology, chemistry, pathology, physics and hygiene as demanded by the State Examining Boards, and

Resolved, That a copy of these resolutions be forwarded to our representatives at Albany and that they be requested to use all honorable means to defeat this measure.

PERSONAL.

DR. WILLIAM HOUSE, of Weston, Oregon, formerly of Buffalo, has accepted an appointment as associate medical director of Mount Tabor Sanitarium at Portland, Oregon.

DR. FLOYD S. CREGO, of Buffalo, gave a dinner to Brigadier-General L. W. Pettibone and other members of his staff at the Buffalo Club, Wednesday evening, January 13, 1904. Other guests were General Samuel M. Welch, Colonel of the 65th, and Drs. Roswell Park, Charles G. Stockton, and A. H. Briggs. Dr. Crego retires from the position of surgeon (Lieut.-Colonel) of the Fourth Brigade, N. G. N. Y., which he has held for several years.

DR. WILLIAM C. KRAUSS, of Buffalo, was elected president of the Medical Society of the County of Erie during its annual meeting held January 12, 1904.

DR. WILLIS G. GREGORY, of Buffalo, was elected president of the State Board of Pharmacy during its last annual meeting held at Albany, January 4, 1904.

DR. CHARLES L. VAUX, of Buffalo, who graduated in medicine here in 1902, has been appointed junior physician at the Man-

hattan State Hospital and left for his post of duty at New York, early in January. Dr. Vaux served a term as interne at the Buffalo Hospital of the Sisters of Charity, during which time after examination his name was placed upon the state civil service eligible list, from which the appointment above referred to was recently made.

DR. THOMAS DARLINGTON, of New York, a practitioner of standing and a physician of skill, has been appointed president of the New York City Board of Health by the new Tammany administration.

DR. JOHN MCGAW WOODBURY has been reappointed commissioner of street cleaning by Mayor McClellan. Dr. Woodbury has proved himself one of the most efficient heads the New York city street cleaning department ever had.

DR. CHAUNCEY PELTON SMITH, of Buffalo, formerly surgeon to the Lackawanna Steel Company, has resumed the practice of his profession at 481 Franklin street. Telephone, Tupper 412.

DR. JAMES F. W. ROSS, of Toronto, is spending the winter in Egypt. He expects to return to his home about April 1.

E. G. SWIFT, of Detroit, has been appointed general manager of the great house of Parke, Davis & Company, vice William M. Warren, deceased. Mr. Swift brings matured experience to his new and responsible position derived from long service as a subordinate of Mr. Warren. We feel sure that the business will progress under Mr. Swift's administration.

DR. CHARLES A. L. REED, of Cincinnati, was the guest of honor at the annual meeting of the Columbus (O.) Academy of Medicine, December 21, 1903, at which he delivered an address entitled, Doctors in politics. The attendance was large and Dr. Reed received the plaudits of the assemblage for his interesting, witty, and eloquent address.

DR. HENRY D. INGRAHAM, of Buffalo, was elected president of the Medical Union at its annual meeting, held in December, 1903. Dr. Ingraham has been ill of pneumonia during the past few weeks, but is nearly or quite well again.

PROFESSOR JOHAN VON MIKULICZ-RADECKI, lecturing not long ago at Breslau on his recent trip to the United States, said that he found more fruitful ideas among the American surgeons than among the French and English. He added: "The time is past when we were the givers and Americans the receivers. The American character has as a fundamental feature unlimited self-confidence, and the American believes he can do anything he wishes."

Professor Mikulicz's visit to Buffalo last April, at which time a dinner was tendered him, will be remembered pleasantly by everyone who was privileged to meet him.

DR. WILLIAM C. KRAUSS, of Buffalo, has been elected president of the professional staff of the Emergency Hospital at the recent annual meeting of the physicians who serve that institution.

DR. EUGENE A. SMITH, of Buffalo, has been appointed surgeon of the fourth brigade, N. Y. N. G., with the rank of lieutenant colonel, vice Lieutenant Colonel Floyd S. Crego, M. D., retired at his own request. Dr. Smith's service in the Spanish war as a field officer will add to his other qualifications as chief medical officer of the command to which he has been appointed.

OBITUARY.

DR. BYRON HIRAM DAGGETT, of Buffalo, died at the General Hospital, December 30, 1903, after a gallstone operation, aged 62 years. Dr. Daggett was born at Girard, Pa., received his preliminary education at Allegheny College, attended a medical course at the University of Michigan, and took his doctorate degree from the medical department of the University of Buffalo in 1867. He began the practice of medicine immediately in Buffalo, and continued to be so engaged until his death. He served two terms as health physician, beginning in 1869, and 8 years as police surgeon, beginning in 1876. He was also for a number of years surgeon of the 74th Regiment, N. G. N. Y.; was a member of the staff of the Emergency Hospital and of the Buffalo Hospital of the Sisters of Charity; and also was attending surgeon at the Erie County Hospital. Of late years he turned his attention chiefly to genitourinary medicine and surgery and achieved much success in the practice of this specialty. It was in this branch that he served in the hospitals above named.

Among his other accomplishments Dr. Daggett was a man of mechanical ingenuity, having invented many instruments and appliances, valuable not only in his own special branch but useful also in other fields of medicine or surgery. The Daggett examining table in use among surgeons and gynecologists is one of the best yet devised, and serves as an example of Dr. Daggett's ingenious turn of mind.

Dr. Daggett was a companionable man, full of wit, biting sarcasm and sparkling anecdote, one or all of which he could use with effect when occasion required. The various phases of his character have been masterfully dealt with in a memorial which we publish elsewhere in this issue of the JOURNAL. For some years he conducted the department of genitourinary surgery in the JOURNAL, and occasionally original contributions were offered from his facile pen. Dr. Daggett is survived by a widow and two sons.

DR. FRANK S. JACKSON, of Dunkirk, died January 1, 1904, aged 52 years. He graduated in medicine at New York University Medical College in 1882, and for many years has been engaged in practice at Dunkirk. He is survived by a widow, father, mother, one brother, and one sister, the latter being Mrs. E. B. Osborne, of Mount Morris. His brother, Robert Jackson, is engaged at the New York Central railroad shops at Depew.

DR. HAMILTON ATCHISON WEST, of Galveston, Texas, died December 30, 1903, at the residence of his brother, Dr. James N. West, New York city, after a brief illness. Dr. West was one of the most prominent physicians in the southwest, where he acquired a large practice, became secretary of the board of health, and was, for many years, secretary of the Texas State Medical Society. He was a native of Kentucky, where he was born in 1849, and graduated from the medical department of the University of Louisville in 1872. Dr. West made a special study of yellow fever, dengue, and typhoid fever, being often quoted as authority on the former disease. He was formerly professor of the theory and practice of medicine in the medical department of the University of Texas. He served as vice-president of the American Medical Association in 1898. His death is a sad blow to the medical profession in the southwest, as well as to his host of friends throughout the country.

DR. PETER BROADT, a homeopathic physician of Buffalo, died January 21, 1904, aged 70 years.

SOCIETY MEETINGS.

THE Southern Surgical and Gynecological Association at its annual meeting, held in Atlanta, December 15-17, 1903, elected the following named officers for the ensuing year: president, Floyd W. McRae, Atlanta; first vice-president, George S. Brown, Birmingham; second vice-president, J. Shelton Horsley, Richmond; treasurer, Charles M. Rosser, Dallas, Tex; secretary, William D. Haggard, Nashville. Dr. Richard Douglas, of Nashville, presented a memorial of Dr. William E. B. Davis, which was an eloquent and appropriate tribute to the distinguished founder of the association. The next annual meeting will be held at Birmingham, December 13-15, 1904, and Dr. John D. S. Davis will act as chairman of the committee of arrangements.

THE first French congress of climatotherapy and hygiene of towns will be held at Nice, from April 4 to 9, 1904, under the presidency of Professor Chantemesse. The following named five subjects will be discussed: (1) the climate of the French Mediterranean coast; (2) adaptation of the individual to climate; (3) influence of the French Mediterranean coast climate on tuberculosis and tubercular patients; (4) the influence of climate of the French Mediterranean coast on rheumatism and on those subject to rheumatism; (5) disinfection of towns. Dr. Hérard de Besse is secretary general of the congress, Beaulieu-sur-Mer.

THE Mississippi Valley Medical Association will hold its thirtieth annual meeting at Cincinnati, O., October 11, 12, 13, 1904. Dr. B. Merrill Ricketts has been elected chairman of the committee of arrangements. The list of officers was published in the issue of the JOURNAL for November, 1903.

THE American Electrotherapeutic Association will hold its fourteenth annual meeting at Saint Louis, September 13-16, 1904, under the presidency of Dr. A. D. Rockwell, of New York. Dr. Ernest Wende, of Buffalo, is a member of the executive council. A booklet has been issued giving a historical sketch of the association, lists of officers, committees and members, together with other information. Dr. Charles Edward Skinner, of New Haven, is the secretary.

THE seventh international congress of otology will be held at Bordeaux, France, August 1-4, 1904, under the patronage of the Minister of Public Instruction. The official languages of the congress will be French, English, German, and Italian. A museum

devoted to the exhibition of surgical instruments, anatomical and pathological preparations concerning the ear, nasal fossæ, and nasal pharynx will be conducted during the congress.

The discussion of the following subjects will constitute the order of the day:

1. Choice of a simple and practical acoumetric formula—leaders: Mm. Politzer, Gradenigo, Delsaux.

2. Diagnosis and treatment of labyrinthine* suppuration—leaders: Drs. Brieger, Von Stein, Dundas, Grant.

3. Technique and care of otogenous cerebral abscess—leaders: Drs. Knapp, Schmiegelow, and Botey.

The Prize Lenval, granted through the generosity of Baron Lenval, will be awarded at the congress for the most practical treatment of auditory affections during the past two congresses. One of the jurors to award this prize is Dr. D. B. St. John Roosa, of New York. Dr. Lermoyes, Rue de la Boltie 20, Paris, is secretary general of the congress.

THE Buffalo Academy of Medicine held meetings during the month of January, 1904, as follows:

Section on Ophthalmology, Otology, Laryngology and Rhinology.—The postponed meeting of this section was held at the University of Buffalo, on Monday afternoon, January 4, at 5 o'clock. Program: Clinical anatomy of the middle ear, illustrated by stereopticon, Professor B. A. Randall, president of the American Otological Society, and professor of diseases of the ear, at the University of Pennsylvania, Philadelphia.

Section on Surgery.—Tuesday evening, January 5. Program: Exploratory operations, their justifiableness, Eugene A. Smith; Should the surgeon and the radiographist work together? Illustrated by stereopticon, A. W. Bayliss.

Section on Medicine.—Tuesday evening, January 12. Program: Are we as physicians carriers of contagion? Lucien Howe; discussion by H. G. Matzinger, Herbert U. Williams, and Thos. B. Carpenter.

Section on Pathology.—Tuesday evening, January 19. Program: The practical issues in studying the nature of mental diseases, Adolph Meyer; discussion was opened by Drs. Putnam, Krauss, and Hurd.

THE American Medico-Psychological Association will hold its sixtieth annual meeting, beginning Monday, May 30, and ending Friday, June 9, 1904, at the Planters Hotel, Saint Louis,

Mo. Titles of papers should be sent to the secretary, Dr. C. B. Burr, Flint, Mich.

THE American Public Health Association, at its recent meeting in Washington, D. C., elected the following named officers: president, Carlos J. Findlay, Havana, Cuba; first vice-president, J. R. Monjaras, Mexico; second vice-president, William C. Woodward, Washington, D. C.; secretary, Charles O. Probst, Columbus; treasurer, Frank W. Wright, New Haven.

THE Western Surgical and Gynecological Association, at its recent annual meeting at Denver, elected the following named officers for the ensuing year: president, Charles H. Mayo, Rochester, Minn; first vice-president, H. D. Niles, Salt Lake City; second vice-president, L. L. McArthur, Chicago; secretary-treasurer, B. B. Davis, Omaha.

BOOK REVIEWS.

A TEXTBOOK OF OBSTETRICS. By J. CLARENCE WEBSTER, M. D., (Edin.), Professor of Obstetrics and Gynecology, Rush Medical College, in Affiliation with the University of Chicago. Octavo, 767 pages, with 383 illustrations, 23 in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep and half morocco, \$6.00 net.)

To the already long list of excellent textbooks on obstetrics this one must be added. While, strictly speaking, we may not need another at present, yet it is quite within the bounds of propriety that the great field of obstetrics should be occupied by treatises written by competent teachers in every part of the country. A careful examination of this book justifies the opinion that the author is qualified not only to teach obstetrics, but also to write a textbook on the subject. His opportunities for observation in the great college where he teaches are almost unlimited, and he appears to have utilised them to advantage.

One of the best tests of the practical value of a work on obstetrics is the manner in which asepsis and antisepsis is applied,—a topic in which this treatise is not found wanting. It is pointed out, also, that this author has given prominence to anatomic changes in pregnancy, labor, and the puerperium, based largely on his own studies of frozen sections. Furthermore, he has presented embryologic, physiologic, and pathologic data that bear importantly upon many obstetric questions. These features serve to stamp the author's originality upon the work with marked emphasis. However, these researches, though minute in detail, have not prevented the proper unfolding of obstetrics in its clinical aspects. The student, whether undergraduate or junior

practitioner, will always manifest special interest in the practical side of the subject, and will rely upon clinical teaching as affording the best instruction. It is at the bedside that he will acquire the art of diagnosis and treatment in its longest stride toward perfection. This treatise is the outgrowth of the highest recognition of this established principle. It teems throughout its pages with evidence of great clinical experience on the part of the author, who seems to know just how to interpret and apply this experience to the best advantage in teaching.

In the matter of illustrations the book is far beyond the average. Many of the pictures are original, and those which are not, have been taken from the most approved sources. As a final thought, we may add that as a practical textbook on obstetrics for both student and practitioner, there is left very little to be desired, it being as near perfection as any compact work that has been published.

A TREATISE ON ORTHOPEDIC SURGERY. By ROYAL WHITMAN, M. D., Instructor in Orthopedic Surgery in the College of Physicians and Surgeons, Columbia University, New York. Second edition, revised and enlarged. Octavo, 820 pages, with 507 engravings, mostly original. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$5.50 net.)

Orthopedic surgery is a fascinating study to one who possesses mechanical skill and an aptitude for correcting deformities of the human body. Whitman has risen to the distinction of authority in this department of surgery, and has written a treatise that establishes his claim to high rank among those who teach and practise orthopedic surgery.

The first edition of the work met with favor and became exhausted sooner than was anticipated; this second one, therefore, is now put forth with such revisions as became necessary to bring it forward to the immediate present in its representations of this most important branch of medical science. In addition to other topics, perhaps quite as important, Whitman gives a complete dissertation of the Lorenz treatment of congenital dislocation of the hip-joint and other deformities, for which this famous surgeon has devised special methods of treatment. The Lorenz operation has attracted special attention of late, because of the visits of Lorenz to this country in 1902 and 1903, during which he demonstrated it at clinics held in the principal cities. It is, therefore, appropriate that it should be intelligently set forth in such a treatise by so competent an observer, for, indeed, Whitman himself was a participant in many of the clinics referred to.

The illustrations of the Lorenz operations are such exact reproductions that they convey nearly as good an idea of it as could be obtained by a personal attendance upon the clinics. Moreover, the entire book is especially well illustrated which adds to its general value. It is one of the best all-around working volumes of orthopedic surgery that has been printed.

A TEXTBOOK OF DISEASES OF WOMEN. By BARTON COOKE HIRST, M. D., Professor of Obstetrics in the University of Pennsylvania; Gynecologist to the Howard, the Orthopedic, and the Philadelphia Hospitals. Octavo, 675 pages, with 650 mostly original illustrations, many in colors. Philadelphia, New York, London: W. B. Saunders & Co. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

Based on a teaching and practising experience of twenty years Hirst offers this work to the profession as a gynecological guide, and adapts it to the average requirements of undergraduate, general practitioner, and specialist. He is not a stranger to the medical profession, his work on obstetrics issued several years ago, now in its fourth edition, having favorably introduced him.

The work begins with the usual instructions relating to examinations and local treatment, next considering anomalies of development in the general tract; then diseases and injuries of the vulva, including coccygodynia; after which follow in their regular order, diseases and injuries of the vagina; injuries and diseases of the cervix; displacements and diseases of the uterus; diseases of the endometrium, including disorders of menstruation and sterility; the fallopian tubes and extrauterine pregnancy; diseases of the ovaries; diseases of the pelvic connective tissue and of the peritoneum; diseases of the urinary tract; the detailed technic of gynecic surgery; and an index. It is arranged in parts, each of the foregoing titles constituting one part.

The author, as will be observed, has adopted the anatomical instead of the pathological classification, which he believes is the most logical as well as the most convenient arrangement of subjects. He also lays claim, and with reason, to having presented a concise description of the diseases of women in which special prominence is given to diagnosis and treatment. Furthermore, he has developed the technic of gynecic surgery in a most satisfactory and thorough-going manner, giving its minutest details, from the inception of anesthesia to the closure of the incision.

The illustrations are of a high order of merit. A large portion are from original photographs or water colors, and are presented in large numbers for the purpose of giving the text practical elucidation. Hirst's textbook of obstetrics has already taken its place in the first ranks as an authoritative exposition of the science and art of midwifery, and we have no doubt that this companion volume will take an equally high place in the literature of gynecology.

A NONSURGICAL TREATISE ON DISEASES OF THE PROSTATE GLAND AND ADNEXA. By GEORGE WHITEFIELD OVERALL, M. D., formerly Professor of Physiology in the Memphis Hospital Medical Collège. Duodecimo, pages 217. Illustrated. Chicago: Marsh & Grant Co. 1903.

There is some good in this book which cannot be spoiled by the author's faddism or his mistaken idea regarding stricture of the prostatic urethra. One of the good features is that he approaches the subject in a methodic manner; another is that the material is based largely on his own experience, and is illus-

trated by case reports. He opens with a brief description of the anatomy and function of the prostate. The diseases of the organ are taken up in order, their symptoms concisely stated, causation, probable duration and prognosis clearly and lucidly outlined. Treatment is also given, but this portion is useless except to one who is immersed in the belief that in electrolysis and cataphoresis lie the cure of all prostatic disease. Dr. Overall freely admits there are some cases where operation is justifiable, but they are so few and far between that they apparently do not merit mention.

From the standpoint of the chronic electrotherapist the work is complete; and although one might question Dr. Overall's persistent antagonism to operative procedures for hypertrophied prostate in favor of his equally persistent advocacy of electrolysis for pretty nearly every ill of the organ, yet his work shows him to be thoroughly in earnest,—even if slightly misguided and overburdened with enthusiasm for his methods. It is unfortunate that Dr. Overall, who is really a clever man and an earnest student, should be among the last to emerge from the electrolytic trance. His statement that organic stricture is never found in the prostatic urethra is a mis-statement of fact, unintentional, of course. Dr. Overall has been merely unfortunate in not seeing stricture thus placed, for such strictures do exist. Fuller, of New York, has reported them; so has Park, of Buffalo.

N. W. W.

A TEXTBOOK OF PATHOLOGY. By ALFRED STENGEL, M. D., Professor of Clinical Medicine in the University of Pennsylvania. Octavo volume of 933 pages, with 349 text-illustrations, many in colors, and 7 full-page colored plates. Fourth edition, revised. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

The increasing interest in the study of pathology is indicated by the fact that the number of authors has multiplied within the last few years, until now there are numerous good textbooks offered to the student of morbid anatomy. Again, the book before us, first issued in 1898, has already reached its fourth edition,—a fact that would have been impossible twenty-five or thirty years ago. A further evidence of the growing concern of the profession in pathology is the fact that within even two or three years the accumulation of material has been embarrassing almost, and renders the task of revising a difficult one. Stengel, however, has sought to incorporate in this new edition only demonstrated facts, which renders his book all the more valuable.

The principle revision occurs in the section on general pathology, particularly Ehrlick's theories of immunity and allied processes, the chapters on inflammation, bacterial diseases,—especially typhoid fever, tuberculosis, yellow fever, and dysentery; also the section on diseases of the blood. Some new illustrations have been introduced, and a few have been eliminated which serves to

freshen the treatise and keep it well to the fore in this respect. It is doubtful if the student of medicine today can find a more practical textbook on pathology.

A TEXTBOOK OF THE PRACTICE OF MEDICINE. By JAMES M. ANDERS, M. D., Professor of the Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Sixth edition, thoroughly revised. Octavo, 1,300 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.50 net; sheep or half morocco, \$6.50 net.)

So recently have we commented on the excellence of Anders's practice, not once nor twice but several times as each succeeding volume has appeared, that we feel it almost the work of supererogation to further discuss its claims to professional favor. However, it is proper to say that there are a number of topics that belong to the changing and rapidly growing class, as far as our knowledge of them is concerned. The author has considered all these subjects in the new edition, among which are mosquito-borne diseases, bacillary dysentery, cholecystitis, certain animal parasitic diseases, the use of the *x*-rays in diagnosis and treatment; also several new subjects have been introduced, among which are paratyphoid fever, the fourth disease, trypanosomiasis, orthostatic albuminuria, transcortical aphasia, adiposis dolorosa, and amaurotic family idiocy.

This treatise is preëminently a guide for the practising physician and student of medicine, and is unsurpassed as a textbook on internal medicine.

CLINICAL EXAMINATION OF THE URINE AND URINARY DIAGNOSIS. A Clinical Guide for the use of Practitioners and Students of Medicine and Surgery. By J. BERGEN OGDEN, M. D., formerly Instructor in Chemistry, Harvard University Medical School, Boston. Second revised edition. Octavo, 418 pages, illustrated, including 11 plates, 9 of them in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$3.00 net.)

The design of this work, as stated by its author, is to present in as concise a manner as possible the chemistry of the urine and its relation to physiologic processes; the most approved working methods, qualitative and quantitative; the diagnosis of diseases and disturbances of the kidneys and urinary passages.

The chief value of the book lies in its application of the information furnished by chemic and microscopic examination of urine, to urinary diagnosis. Chemic and microscopic methods take up part 1. In part 2, special attention is paid to diagnosis, the character of the urine, and the differential diagnosis of diseases of the kidney and urinary tract, local and general, surgical and medical; the clinical symptoms of each disease and the peculiarities of the urine in general diseases. In its present form, this being the second edition, brought up to date in method, it is beyond question one of the most useful and satisfying books on the subject of urinary analysis, and it cannot be too highly recommended.

N. W. W.

PROGRESSIVE MEDICINE. Fifth Annual Series. Volume IV. December, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 444 pages; illustrated. Philadelphia and New York: Lea Brothers & Co. (Per volume, \$2.50, by express prepaid. Per annum, in four cloth-bound volumes, \$10.00.)

The subjects dealt with in this volume are as follows: diseases of the digestive tract and allied organs, the liver, pancreas, and peritoneum, by John C. Hemmeter; anesthetics, fractures, dislocations, amputations, surgery of the extremities, and orthopedics, by Joseph C. Bloodgood; genitourinary diseases, by William T. Belfield; diseases of the kidneys, by John Rose Bradford; physiology, by Albert P. Brubaker; hygiene, by Charles Harrington; practical therapeutic referendums, by H. R. M. Landis.

One of the important features of this periodical is the excellent method of arranging and presenting the material. The headings and subheadings stand out in bold type and the printed page is agreeable to the eye. This makes it easy of reference and convenient for research. Moreover, the material itself comprises the better part of recent literature relating to the subjects set forth.

TRANSACTIONS OF THE TWENTY-FIFTH ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION, held at Washington, D. C., May 12-14, 1903. James E. Newcomb, M. D., Secretary. New York: Rooney-Otten Co.

This volume of association transactions contains many interesting papers relating to diseases of the nose and throat. Dr. W. Scott Renner, of Buffalo, presented a paper entitled, Tertiary syphilis of the nose and pharynx, which is comprehensive in character and is a distinct addition to the literature of the subject. Dr. John O. Roe, of Rochester, read a paper, the subject of which is, The removal of obstructions and cicatricial contractions of the nose by the plastic method, which is well illustrated and contains many valuable suggestions, that contribute toward the further perfection of the surgery of the nasal passages. Many other interesting and useful subjects are discussed in this book which will prove of interest to every physician called upon to practise laryngology.

This association is one of the oldest of the special societies and is famous for the scientific work which it does at its annual meetings and is presented through its published transactions.

NOSE AND THROAT WORK FOR THE GENERAL PRACTITIONER. By GEORGE L. RICHARDS, M. D., Otologist and Laryngologist, Fall River Union Hospital, Fall River, Mass. Duodecimo, pp. 330. Illustrated. New York: International Journal of Surgery Co. 1903. (Price, \$2.00.)

A brochure constructed on lines similar to this book has long been needed. A general practitioner of medicine, with an aptitude for surgical manipulation and a knowledge of the anatomy and physiology of the nasal passages, can treat many of the sim-

pler maladies of the nose and throat. Generally speaking, the larger textbooks are too elaborate and technical to serve as guides in diagnosis or treatment for any but specialists.

This author has prepared a little treatise that meets the want described. He gives enough anatomy and physiology to furbish up the memory and to lay the foundation for that which follows. In his description of instruments he only takes up such as are needed in ordinary diagnosis and treatment, the use of which can be readily learned by every intelligent physician. The illustrations have been chosen with special reference to the conditions named and if we mistake not, the book will serve a useful purpose. It is well made up, is of convenient size and reasonable in price.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume X. Skin and Venereal Diseases, Nervous and Mental Diseases. Edited By W. L. Baum, M. D., Hugh T. Patrick, M. D. Duodecimo, pp. 236. Chicago: The Year Book Publishers. 1903. (Price, \$1.25; entire series, \$7.50.)

The department of skin and venereal diseases, which comprises about one-half of this volume, is prepared by William L. Baum, professor of skin and venereal diseases in the Chicago Post-Graduate Medical School. Professor Baum has made discreet selection from the current literature of the past year and has compiled a most useful section of this volume. We note on page 94, an abstract of Dr. J. H. Dowd's paper in which he considered the use of sounds in urethral inflammation and for the dilatation of stricture.

The department of nervous and mental diseases, prepared by Hugh T. Patrick, professor of neurology in the Chicago Polyclinic, and Charles L. Mix, professor of general medicine in the Post-Graduate Medical School of Chicago, presents a condensation of the literature of this branch of medicine that should prove valuable to the general practitioner.

Both departments contain several excellent illustrations which serve to amplify or explain the text in a satisfactory manner.

MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. By CHARLES H. MAY, M. D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York. Third edition, revised. Duodecimo, 421 pages, with 275 original illustrations, including 16 plates, with 36 colored figures. New York: William Wood & Co. 1903. (Price, \$2.00.)

Some slight changes have been made in this edition. The book was so carefully prepared in the first instance, that scarcely anything could be added which would improve its value as an aid in diagnosing and treating most diseases of the eye. The elimination of the confusing grouping of remedies usually em-

ployed is to be commended. The only criticism we feel justified in offering is one that applies to all textbooks on this subject,—namely, the limited therapeutic hints on lid treatment. With this exception no fault can be found, for it is one of the best reference books for students and practitioners yet issued.

R. H. S.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume XI. Nos. 1-9. Baltimore: The Johns Hopkins Press. 1903.

The contents of this report includes a historical, clinical, and experimental study of pneumothorax, by Charles P. Emerson; clinical observations on blood pressure, by Henry Wireman Cook, and John Bradford Briggs, and a dissertation on the value of tuberculin in surgical diagnosis, by Martin B. Tinker. The first title covers the greater part of the volume,—450 pages,—and gives a summary of the literature from Hippocrates, fifth century B. C., to Avon, A. D. 1902,—353 references in all, which makes it a most valuable contribution for working purposes. The other papers are well prepared studies upon the topics which they respectively consider.

BOOKS RECEIVED.

Lea's Medical Epitome Series. Organic and Physiologic Chemistry. A Manual for Students and Practitioners. By A. McGlannan, M. D., Associate Professor of Physiologic Chemistry, Instructor in Clinical Laboratory, College of Physicians and Surgeons, Baltimore, Md. Duodecimo, pp. 246. Illustrated with 9 engravings. Series edited by V. C. Pedersen, A. M., M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, \$1.00.)

The Blues, (Splanchnic Neurasthenia), Causes and Cure. By Albert Abrams, A. M., M. D., (Heidelberg), F. R. M. S., Consulting Physician, Denver National Hospital for Consumptives, the Mount Zion and the French Hospitals, San Francisco. Duodecimo, pp. 240. Illustrated. New York: E. B. Treat & Co. 1904. (Price, \$1.50.)

Transactions of the American Gynecological Society. Volume 28. For the year 1903. Twenty-eighth annual meeting held at Washington, D. C., May 12-14, 1903. J. Riddle Goffe, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer.

The Treatment of Fractures: With Notes upon a Few Common Dislocations. By Chas. L. Scudder, M. D., Surgeon to the Massachusetts General Hospital. Fourth Edition. Thoroughly Revised, Enlarged, and Reset. Octavo volume of 534 pages, with nearly 700 original illustrations. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Polished Buckram, \$5.00 net; Sheep or Half Morocco, \$6.00 net.)

A Textbook of Legal Medicine and Toxicology. Edited by Frederick Peterson, M. D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and Walter S. Haines, M. D., Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College, in affiliation with the University of Chicago. Two imperial octavo volumes of about 750 pages each, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Per volume, Cloth, \$5.00 net; Sheep or Half Morocco, \$6.00 net.)

Transactions of the National Association of United States Pension Examining Surgeons. Second annual meeting held at Washington, D. C., May 13 and 14, 1903, including an account of first meeting held at Saratoga Springs, June 9, 1902. Wheelock Rider, M. D., Secretary. Published by the Association.

The Pathogenic Microbes. By M. Le Dr. P. Jousset, Physician to the Hospital St. Jacques, Paris. Authorised translation by Horace P. Holmes, M. D. One hundred and ninety-two pages. Philadelphia: Boericke & Tafel. 1903. (Cloth, \$1.00.)

The Practical Care of the Baby. By Theron Wendell Kilmer, M. D., Associate Professor of Diseases of Children in the New York School of Clinical Medicines; Assistant Physician to the Out-Patient Department of the Babies' Hospital, New York. Duodecimo, pp. 170, with 68 illustrations. Philadelphia: F. A. Davis Company. 1903. (\$1.00, net, delivered.)

The Self-Cure of Consumption Without Medicine. With a Chapter on the Prevention of Consumption and Other Diseases. By Chas. H. Stanley Davis, M. D., Meriden, Conn. Pages, 176. New York: E. B. Treat & Co. 1904. (Price, 75 cents.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume III. The Eye, Ear, Nose, and Throat. Edited by Casey A. Wood, M. D., Albert H. Andrews, M. D., and Gustavus P. Head, M. D. Duodecimo, 332 pages. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$5.50, payable in advance.)

Social Diseases and Marriage. Social Prophylaxis. By Prince A. Morrow, M. D., Emeritus Professor of Genitourinary Diseases in the University and Bellevue Hospital Medical College, New York; Surgeon to the City Hospital. Octavo, pp. 390. Lea Brothers & Co., New York and Philadelphia. 1904.

LITERARY NOTES.

THE Cincinnati *Lancet-Clinic* enters upon the new year with an entire change in its editorial management. Dr. J. C. Culbertson, who has so long and ably conducted the journal, retires and Dr. Mark A. Brown assumes editorial control. Dr. Frank B. Cross becomes the business manager, and a long list of names, many of them well known in the annals of medicine, are announced as a staff of associate editors.

Dr. Culbertson is entitled to a rest after thirty years or more of continuous editorial work. We wish him prosperity and continued good health, while for the *Lancet-Clinic* we offer our best congratulations for a prolongation of its successful career under the new management.

THE *Medical Fortnightly* presents itself in a new dress in its first issue for 1904, dated January 11. Its appearance is very much improved and is in every way a credit to those concerned in its editorial and business management.

THE *Medical Recorder* is the name of a new journal published at Shreveport, La. It is edited by Dr. Oscar Dowling as principal, and Drs. Louis Abramson, of Shreveport, and R. H. T. Mann, of Texarkano, Ark., as associates. The first number bears date January, 1904, and contains 57 standard octavo pages. It also contains much material of medical interest and several obituary notices with half-tone plates of deceased physicians. It is especially intended to reach the states of Louisiana, Texas, and Arkansas and, no doubt, will be greatly appreciated, not only by physicians in those states, but throughout the country.

ITEMS.

BATTLE & COMPANY, of Saint Louis, are issuing a series of bacteriological and blood charts, which should prove of interest to physicians. In March, 1904, pamphlet No. 1 of the series will be issued, which will contain 12 illustrations of the intestinal parasites.

A MEDICAL press exhibit is proposed to be given at the Saint Louis World's Fair. Space has been secured for that purpose in the palace of liberal arts by Dr. Charles Wood Fassett, editor of the Saint Joseph (Mo.) *Medical Herald*, who solicits the coöperation of editors and publishers of medical journals. Dr. Fassett should be addressed with promptitude on this subject.

MESSRS. FAIRCHILD BROTHERS & FOSTER, of New York, entertained their employes at luncheon December 24, 1903. The guests numbered about 140 persons and were assembled on the fourth floor of their large establishment.

Mr. B. T. Fairchild welcomed the guests to the "Christmas party," as it was called, and Mr. E. W. Dusenberry responded, after which Messrs. S. W. Fairchild and M. G. Foster also spoke. There was music during and after the luncheon, which began at 12.30, and at three o'clock the annual presents in gold were distributed among the employes, the remainder of the day being declared a holiday.

MESSRS. VICTOR KOEHL & COMPANY, of New York, have recently sent out a chart relating to acute poisoning, giving descriptive classification and varieties, with special symptoms, chemical and physiological antidotes, fatal doses, simple tests and remarks on treatment. It will be found a useful reminder to hang on the physician's office wall.

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No. 8.

ORIGINAL COMMUNICATIONS.

The Early Days of Ovariectomy.¹

By MATTHEW D. MANN, A. M., M. D., Buffalo, N. Y.

THE rising generation, which has only seen abdominal surgery in its full development, is apt to forget the trials and struggles of those who first attempted to open the abdomen, and who finally put the operation on a firm basis. Few can realise now the amount of opposition, both within and without the profession, which existed. McDowell, as we shall hear, was threatened with death; and later operators were almost ostracised for attempting this "murderous operation." In the last twenty years, the triumphs of surgery have been so great that now no operation, no matter what its magnitude, is condemned untried, and the result is awaited with patient and indulgent expectation. But only forty years ago, this was not so, and at the time that abdominal surgery had its beginning, the feeling of opposition to "butchering," as they called it, was most emphatic and unreasoning.

Abdominal surgery had its beginning in America. Many attempts have been made to wrest this triumph from us, but all have failed. The claims of the United States are now generally admitted as being clearly proved, and the name of the first operator rescued from oblivion and duly honored.

The first abdominal section, having for its object the removal of an ovarian tumor, was done by Dr. Ephraim McDowell, on December 13, 1809, in Danville, Ky. Although practising in what was then the backwoods, McDowell was by no means an uneducated, ignorant, or pretentious adventurer. The operation was done after long consideration, after a full understanding of

1. Read at meeting of the Canadian Medical Association, London, Ont., August 26, 1903; also printed in the *Canadian Jour. Med. and Surg.*, September, 1903.

the difficulties with which he had to contend, and a careful planning of the technique. He had been a student of the great John Bell, in Edinburgh, and while there had heard it suggested that perhaps an ovarian tumor could be successfully removed. He formed the determination at that time that, if the proper case ever presented itself, he would make the effort to operate. After his return to Danville, he was sent for to see a Mrs. Crawford, residing a long distance away. McDowell found her trouble to be an ovarian tumor, and gave a fatal prognosis unless she was relieved by the knife. To quote from Dr. Gross:

After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for relief was the removal of the diseased mass. He explained to her, with great clearness and fidelity, the nature and hazard of the operation. He told her that he had never performed it, but that he was ready, if she were willing, to undertake it, and to risk his reputation on the issue, adding that it was an experiment, but one well worthy of trial.

Mrs. Crawford accepted the opinion of the physician with great coolness, and promptly assured him that she was not only willing, but ready to submit to his decision, asserting that any hope of relief was preferable to the agony she suffered. She traveled on horseback—the only mode of locomotion in those days—to the home of Dr. McDowell, sixty miles away. So great was the weight of the tumor resting upon the pommel of the saddle, that a large contusion was formed on the skin.

On the day of the operation, McDowell was conscious that an angry and excited mob of men had collected outside of his house, openly threatening to hang him if his experiment of "butchering a woman" did not succeed. There is no doubt that if the woman had died, McDowell would have lost his life at the hands of his infuriated townsmen.

I have often wondered which was the braver—the man or the woman—the woman, to subject herself to an operation which she knew had never been done, an experiment which would cause intense suffering at the time, anesthetics being unknown, and the result of which must be uncertain; the man, to risk his life for the mere sake of doing good, without hope of reward, except, perhaps, a modest fee, and with certain death confronting him if he failed. It seems to me that the bravery of the man was the greater. He put his life at stake without any necessity impelling him, except his love of humanity and his desire to do good; while the woman had death staring her in the face, and was accepting

an opportunity which had never yet been offered to anybody, to escape the terrible, persistent suffering which would certainly come. To quote from Thomas Keith: "She had not much to lose—a few months only, it may be, of ever-increasing suffering—and she might gain much by an operation, having much to gain." Fortunately for the good of mankind, and of womankind in particular the operation was successful.

The technique of the operation sounds a good deal like an operation done today. The incision was made, about nine inches long, a little to the left of the median line. The tumor was then opened, its contents allowed to escape; after which it was removed from the abdomen, the pedicle tied by strong silk ligature, and the tumor cut off. After this the patient was turned upon her side, to allow all the blood and fluid to escape. This having been accomplished, she was turned on her back, the intestines replaced, and the wound closed by an interrupted suture, the ligature hanging out of the lower end of the incision. Dressings were applied, and the patient put to bed. Five days later, McDowell, on visiting her, found her making her bed. In twenty-five days she returned home in good health, and lived for thirty-two years after, she having been forty-seven at the time of the operation.

McDowell afterwards operated on twelve cases, eight of the thirteen being successful—a record which was not beaten until the advent of antiseptic surgery.

McDowell is described as a tall, strikingly handsome man, with an erect and commanding figure and lustrous black eyes, which seemed to penetrate the very thoughts of those who looked into them. His refinement and intellectual powers were of the highest type. Many stories are told illustrative of his abilities of mind: his unflinching adherence to duty in the face of adversity and difficulties seems to have been one of his strongest points. Stories are told of his adventurous rides through the woods, of fording rushing torrents filled with ice and driftwood, and other anecdotes which illustrate the nobility and force of the man's character. He might well have stood for the original of MacLeod, Ian MacLaren's justly famous hero.

McDowell was a man of strong religious convictions, and we have left to us a very forcible petition offered by him to Almighty God, a few hours before the appointed time to make the first ovariectomy. Who will say that it was not in answer to this prayer that his hand was guided to bring to a successful termination his momentous and trying experiment, fraught with interest, not only to the operator, but to humanity? It was certainly a trying hour to him, and we can well understand that he should have asked for strength and guidance where he thought he could best obtain

them. His biographer says: "His abiding faith in the efficacy of prayer was beautiful, and no doubt his remarkable success in the field of surgery can be largely attributed to his strong convictions and unwavering faith in the Great Jehovah."

After McDowell, no operations of this kind were done until 1821, when Dr. Nathan Smith, Professor of Surgery in Yale College, performed a successful ovariectomy. He was just as much entitled to the honors of a discoverer as was McDowell, for he had never heard of the Kentucky surgeon or of this operation. His methods were different, but the result was just as good.

The third successful ovariectomist was Dr. Alban C. Smith, of Danville, who had been a partner of McDowell's. He operated in 1823. A few scattering operations were done after that, but it was not until 1843-44 that a new impulse was given by the success of Dr. John L. Atlee, which was still further aided by his brother, Dr. Washington L. Atlee, of Pennsylvania. After this, cases became more common, and, taking the country at large, several were reported every year, until in 1855, there were twenty-one cases, with six successes and fifteen deaths. This heavy mortality seems to have had the effect of diminishing the number, as they fell off rapidly, until in the years 1860-63, there were only three in each year. In 1870, Dr. Atlee reported his 200th case, while Kimball had had 121, and Dunlap, Peaslee, J. P. White, McRuer, Thomas, Bradford, Emmet, and Sims had had from 60 to 12 cases each.

In England the operators who first made reputations were Tyler Smith, Baker Brown, Chas. Clay, Thos. Bryant, Thomas Keith, and Spencer Wells. To the latter we must unquestionably give the credit of having contributed largely to influence the profession, and to overcome the opposition which, up to 1860, had existed in England more than anywhere else. Many prominent men opposed the operation, very broadly denouncing those who attempted it as murderers, as guilty of malpractice, and using all their influence to keep the operation down. After Sir Spencer Wells's paper in 1860, opposition was silenced, and from that date it may be said that ovariectomy was adopted as a legitimate resource in England.

My own experience of ovariectomy began in 1870, when I entered the Strangers' Hospital, in New York city, as interne. Dr. T. G. Thomas was appointed gynecologist to this hospital, which had just been established; and, filled with ardor and enthusiasm, he soon collected a considerable number of cases for operation. During the year that I served as senior assistant and house-surgeon, I had under my care twelve operation cases, nine of which recovered. As can be readily imagined, an ovariectomy in

those days was a great event. I have seen in the operating room at the hospital, witnessing and advising, and perhaps assisting, Drs. Thomas, Sims, Peaslee, Emmet, Noeggerath, Sands, Willard Parker, and others of the great lights of surgery in New York at that time. As we had no trained nurses, Dr. E. L. Trudeau, who was my senior by six months, and myself had to take the entire charge of the cases. The nurse would call us frequently during the night, and we would pass the catheter, give hypodermics of morphine, and do all the nursing which is now so much better done by our skilled and trained assistants.

Dr. Thomas's theory in those days was that a great deal of the danger was due to the shock to the nervous system, which led to inflammation; and in order to quiet the nervous system, the patient was put under the influence of opium for a few days in advance of the operation. We can see here the influence of the Alonzo-Clark treatment of peritonitis: if large doses of opium would cure peritonitis, smaller doses would prevent. And so, in order to head off the disease, of which everybody stood in holy terror, the opium was given before the operation was commenced.

Dr. Peaslee was the first to perform drainage, which he did as early as 1855. He passed a catheter through the vaginal wall into Douglas's cul-de-sac at the time of an operation, and left it there, corking the end. Septic symptoms supervening, he removed the cork, and allowed the fluid to come away, and followed it by copious injections into the peritoneal cavity of salt solution, and later by a weak solution of chlorinated soda. He published a paper on the subject in 1870. Thomas immediately took up the idea, following Peaslee's plan of putting a linen tent into the lower angle of the wound. Soon after this the idea of a drainage tube came from Koeberle of Germany. Thomas immediately began its use.

I remember very well the first drainage tube (1871), which was an old-fashioned, hard-rubber vaginal syringe, an inch in diameter, with four holes at the round end. This was introduced on the second day, the tent of cloth which had been placed in the lower angle of the wound the day of the operation, being removed.

Dr. Thomas also followed Peaslee by washing out the abdomen in a septic case, after the operation, using a solution of hyposulphite of soda. As early as 1871, he washed out the abdomen before closing the wound. Antiseptic ideas were then just beginning to dawn. Carbolic acid had just been discovered, and Lister was making his first experiments in what we now call "Listerism," experiments which were destined to revolutionise surgical methods, and to make the name of Sir Joseph Lister one of the greatest in the record of the benefactors of the race.

Although, as already mentioned, drainage was used before Sims began to do abdominal work, it was his paper, published in 1872, which really popularised drainage in abdominal cases.

Dr. Thomas, up to 1870, had had twenty-seven ovariectomies, and was only excelled by one other operator in New York, namely, Dr. Peaslee, who had had twenty-eight. Sims, who never made a great name as an abdominal surgeon, had had only twelve. It must be remembered that at this time all other forms of abdominal surgery were unknown and almost undreamed of. I remember very well when Pean's book came out, about 1871, detailing the histories of a large number of fibroids that had been successfully removed, that Dr. Thomas expressed very grave doubt as to the truthfulness of the histories.

In those days the after-treatment of the cases was made very much more difficult, and the convalescence very much slower, by the method of treating the pedicle. While McDowell had used the ligature, dropping the pedicle, and had done so successfully, others seemed to be afraid of following his example. The great doubt was as to what would become of the piece outside of the ligature. This, it was feared, would die, and poison the patient. Many of the deaths in the early cases were attributed to this cause. To overcome this difficulty, various plans were suggested. Baker Brown used the cautery, and, as Mr. Tait pointed out, had he lived, no doubt abdominal surgery would have been advanced many years; for, although we cannot help acknowledging an immense debt as due to Sir Spencer Wells, still we cannot deny that he kept back ovariectomy and abdominal surgery by his energetic advocacy and use of the clamp. His plan was to clamp the pedicle, leaving it on the outside, the abdomen being closed tightly around it, the clamp preventing it from falling in.

Dr. Thomas was a bold and brilliant operator, a great diagnostician, and full of invention and resources. His record after these early years is well known, though he came a little too late to reap the full advantages of modern abdominal surgery. To my association with Dr. Thomas in those early days, I must attribute my interest in this branch of medicine, and, to a great extent, my success. To no man, living or dead, do I owe more than to him. In fact, had it not been for Dr. Thomas, I should not have held my present positions, as it was by his influence that I became Dr. White's successor and a resident of Buffalo. Dr. Sims, although I knew him well and have seen him do some plastic work, I never had the pleasure of seeing open an abdomen. Dr. Peaslee I also knew well, but never saw him operate.

In those days the New York Obstetrical Society was the scene of many exceedingly interesting discussions. Abdominal sur-

gery and gynecology were making rapid strides in advance. Sims, Peaslee, Thomas, and Emmet were the four men who have done more for gynecology than any Americans who have ever lived. They were then making rapid advances, and in the obstetrical society the new ideas were proposed and weighed and discussed, to be afterwards tested at the bedside and on the operating table, and the results reported back to the society. I was secretary for a number of years, and had the great advantage of being obliged to take down these discussions. I am sure that this was of great benefit to me, as it fixed in my mind a great many facts which I probably should not otherwise have learned.

Besides these greater lights, Noeggerath, whose name is well known as the discoverer of latent gonorrhea; Jacobi, still a nestor in the profession; besides some of the younger men, who have since made name and fame, were active members of the society.

Buffalo took a prominent part in the early days of abdominal surgery. Drs. James P. White and Julius F. Miner were both pioneers. Dr. White probably did a hundred ovariectomies during his life, about 60 per cent. of which recovered, as far as I can learn. Dr. Miner never did so many, but he originated a principle which has made his name to be mentioned wherever the history of ovariectomy has been spoken of—he originated the idea of enucleation. This I had seen done by Dr. Thomas, but had never practised until I did my first ovariectomy in Buffalo.

My first case was done in Hartford, Connecticut, in 1879. The patient was a poor negress. I had to pay the nurse myself, and, as she lived four miles in the country, in a poor little farmhouse, I had to hire a horse each time I made a visit. As you can readily imagine, I did not make a fortune immediately out of the case. Still its effects on my future were greater than were at first apparent. The event was a great one, and my friend, Dr. Munde, came all the way from New York to assist me. He had never operated himself, nor had anyone else present ever seen an ovariectomy. I found a dermoid cyst so adherent that I could not get it all out. I therefore cut off all I could get loose, and sewed the edges of the remaining portion to the edges of the abdominal wound. Two glass drainage tubes were used, one being put into the sac and the other into the abdominal cavity. The patient convalesced very slowly, and required many visits. I estimated that the case cost me \$50. Still it paid, for it gave me experience, and allowed me to say that I was an operator—great advantages when the call came to go to Buffalo.

To illustrate the fear which the early ovariectomists had of the peritoneum, I remember very distinctly a case which came to me a number of years ago. She had a large fibroid tumor and a

tremendous ventral hernia. She told me that she had had an ovarian tumor, which had been removed by Dr. Miner, the first successful operation that he had ever done. She showed me a copy of an account of the operation, published in the *BUFFALO MEDICAL JOURNAL* at that time. In this article, Dr. Miner attributes his success to the fact that he did not pass his stitches through the peritoneum, but only through the skin and fat. This, while it does not explain the success of the operation, certainly explains the ventral hernia. I removed the fibroid, and sewed up the hernia, and sent the woman home cured.

Thus far I have spoken only of ovariectomy; but it is quite natural that the opening of the abdomen for the removal of ovarian tumors should have led to the same procedure for other purposes. In 1876, Dr. Robert Battey, of Rome, Ga., read a paper before the American Gynecological Society, on The extirpation of the functionally active ovaries. He had performed his first operation in August, 1872. In 1879, Mr. Lawson Tait announced that he had done a similar operation, claiming priority over Battey. Prof. Hegar, of Freiburg, in Germany, published in 1878, a paper on The castration of women, his first case having antedated Battey's by a month. After the publication of these papers, the indications for opening the abdomen were very quickly widened, and the operation took firm hold upon the profession, being performed by operators all over the world; and at that time we may say that abdominal surgery, other than ovariectomy, had its origin.

I first removed the ovaries, March 11, 1880, in Hartford, Conn., for a fibroid tumor. The first operation for the removal of the ovaries which was done in western New York, was performed by the late Dr. G. C. Clark, of Niagara Falls, 1882. I had the pleasure of assisting him; the operation was perfectly successful.

My first operation in Buffalo for the removal of the ovaries was in November, 1883. On March 4, 1884, I did my first resection of intestine; likewise the first that was done in Buffalo. In October of the same year, I removed a large fibroid tumor by supra-vaginal hysterectomy with the clamp. The woman is still living.

Although I did many operations for the removal of ovaries and fibroids from that time on, it was not until February, 1888, that I first removed pus tubes. After this, the indications for operations and the number of cases increased rapidly; but I did not meet with a case of extrauterine pregnancy until 1890. I operated on four during that year. As I was almost the only operator practising abdominal surgery in Buffalo then, these

were doubtless the first operations of their kind which were done there.

We thus see that abdominal surgery is of very recent development, the greatest growth and extension of the operation having taken place in the decade between 1880 and 1890. It may now be said to be nearly perfected, and, except in operations on the gall-bladder and the stomach, we cannot look forward to many more advances.

What has made possible the great successes of modern abdominal surgery? Two things will at once come to the mind of each of you—anesthesia and antisepsis. Without these there could have been no development. Although the early operations were done without anesthesia, the operations now undertaken would be impossible under similar conditions.

Nor is antisepsis—or, perhaps, more strictly speaking, asepsis—any less important. The mortality rates of the pioneers are often frightful to contemplate; and only where life was directly threatened, as in ovarian cystic disease, were operations warranted. So recently as 1880, the writer collected all the known cases of oophorectomy—150, with a mortality of 20 per cent.; and in 1884, Bigelow collected 359 hysterectomies for fibroids, with 58 per cent. mortality. Now all this is changed, and we open the abdomen, even in comparatively simple diseases, with perfect confidence in the result, as far at least as sepsis goes. So much has been accomplished by Lister, Pasteur, and their co-workers.

But, after all, is it not to the American workers that a very large share of the mead of praise is due? Who have done more than McDowell, Nathan Smith, the Atlees, Kimball, Miner, Sims, Peaslee, Thomas, Robbs, Battey, Sands, McBurney, and Bull—to say nothing of the men of our own day, who have improved, extended, and perfected the work of their predecessors? Certainly America has a right to be proud of the credit of originating and perfecting this important branch of surgical work. Not only did ovariectomy originate here, but hysterectomy for fibroids was first done by Kimball. Peaslee and Sims originated drainage; Battey first removed diseased ovaries; Willard Parker did the first operation for disease around the appendix; while Sands, McBurney, Senn, and Weir were the pioneers in appendectomy. Bull did the first operation for bullet-wound of the intestines; and Rogers was the first to advocate the operation for ruptured tubal pregnancy. Kimball's lead in removing fibroids was followed by many, and was so perfected by the work of Stimson, Polk, Baer, Pryor, and others, that it is now known as the "American operation." Robbs was the first to do the modern opera-

tion of cholecystectomy, while the genius of Sims had a most important influence on advancing this particular branch of surgery.

But I need not add to the list. It is recent history and familiar to all students of contemporary literature.

When we look back and see what has been accomplished, it seems almost miraculous—all fear of the peritoneum gone; sepsis nearly banished, and scarcely an organ in the abdomen which has not been successfully attacked and removed. Liver, gall-bladder, spleen, stomach, intestines, kidney, uterus, tubes, ovaries, bladder—all have yielded to the surgeon's knife, and their possessors relieved of serious or fatal diseases. It is a proud record. Little did McDowell think, when he took up the knife to make his first abdominal section, to what it would lead, and of the years of agony which would be relieved and the thousands of lives saved. All honor to the men who have done this work. Their names should stand higher in the roll of fame than those of generals and conquerors. They have worked to relieve pain and suffering, and to save life, while the soldiers accomplished their ends only through the infliction of measureless agony, and the sacrificing of countless lives.

31 ALLEN STREET.

Cystitis.¹

By J. HENRY DOWD, M. D., Buffalo, N. Y.

[N presenting to you the subject of inflammation of the bladder, I hope I may be pardoned for purposely omitting much that can only be considered of value to the specialist. On the other hand, it will be my aim to bring to your notice salient points which, if carefully noted, should give you, as general practitioners, a good working basis in handling inflammation of this viscus.

PHYSIOLOGY OF URINATION.

To readily understand inflammation when involving the region in and around the bladder, especially in the male, one must be conversant with the physiology of urination. Urine is retained in the male bladder by the action of two muscles, (*a*) the internal sphincter, involuntary in action, consisting of three or four muscular fibers and situated at the urethro-vesical opening, and (*b*) the cut-off or compressor, being powerful, voluntary in action and situated an inch and a half anterior to the internal, at the bulbo-prostatic junction. Under certain conditions these

1. A lecture delivered before the Gross Medical Club, at Clarence, N. Y., January, 1904, and by request before the Surgical Section of the Buffalo Academy of Medicine, February 2, 1904.

muscles may or may not act entirely under the control of the will. If the bladder is in normal condition, about one and a half to one and three-quarter hours after a previous evacuation the contained fluid therein exerts sufficient pressure to cause the internal sphincter to open, thus allowing urine to pass into the posterior urethra. When this part, which now becomes the true neck of the bladder, fills to a certain extent, the urination sensation occurs and evacuation follows.

It must be evident that as soon as urine trickles into this portion, if acute inflammation exists, nature will try to rid itself of the irritant. At the same time it is a fact that if inflammation exists here sufficiently to produce pus in any quantity this secretion will pass backward, mixing with the urine in the bladder and rendering it opaque. As the inflammation becomes more chronic sensibility is blunted to an extent that the interval between urinations becomes lengthened from two to two and a half and even to three hours. When pus is produced in great quantities, if the urine is passed in divided parts the last will be opaque, yet there may be no inflammation behind the internal sphincter. The same holds good as to the diagnosis of posterior urethritis from the two or three glass tests. Inflammation may exist but pus not being produced in sufficient quantities may adhere to the mucous membrane and be washed out with the first flow of urine, this being opaque while the secondary flow will be clear.

Although the bladder, with but little uneasiness to the patient, can be made a receptacle for 15 to 16 ounces of urine or other fluids, its average capacity should be considered as about 10 ounces.

VARIETIES.

Generally speaking, but two varieties of cystitis exist: (*a*) superficial, or where the mucous membrane and submucous tissue is involved; and (*b*) interstitial, where the inflammation involves the muscular coats and interstitial tissue. Examples of these are, superficial—any inflammation of the bladder due to bacteria other than the tubercle bacilli; interstitial—inflammation due to the tubercle bacilli.

FACTORS IN THE PRODUCTION OF CYSTITIS.

Here, as in inflammation of other parts, three factors are necessary: first, a weakened or damaged condition of the tissue; second, pyogenic bacteria; third, a medium for their development. In congestion we find a most suitable cause for weakening of the parts and, at the same time, there is no doubt but that with congestion the medium is produced from the different glands. The

usual forms of bacteria found in cystitis and in order of frequency are: strepto- and staphylococci, colonbacilli, urobacillus liquefacius septicus, tubercle bacilli and gonococci.

SYMPTOMS.

The symptoms, of course, vary according to the condition present and the cause. Generally speaking, three important symptoms are always present; first, frequency of urination; second, pain, and third, pus in the urine. Other symptoms at times, are hematuria, ammonical fermentation due to decomposition of urea by bacteria forming the carbonate of ammonia, albumin in the urine, and general systemic disturbances.

Frequency.—In acute conditions from any cause, desire is constantly present, but emptying the bladder will take place only about every 15 to 25 minutes during the day and, on an average, every hour during the night. As the condition becomes chronic the desire becomes less frequent until there may be an interval of an hour or more.

Pain is always a prominent symptom and in the acute condition is one of the most important. Although there is an almost constant tenesmus, there is pain of a sharp lancinating character always following the expulsion of the last few drops of urine. This, as with frequency, diminishes much in severity as the condition becomes chronic, except in the presence of stone, tumor, foreign body, ulcer or fissure at the urethro-vesicle opening, when it continues as the most prominent symptom.

Pus.—This product of degeneration is always present, varying in amount from a ground glass appearance (if free hemorrhage stained red) to one closely resembling cider.

Hemorrhage.—Blood is always present in the urine, the quantity varying, according to the condition present. Thus, in the chronic condition it may only be detected by the microscope, whereas in the acute condition the urine may be of a bright red color, and as the bladder contracts in the expulsion of the last few drops of urine, free bleeding generally takes place to the amount of from 30 to 60 drops.

Ammonical Fermentation.—This condition cannot be considered a symptom of cystitis, per se, unless the case is very old and in this condition there is always more or less residual urine, as in hypertrophied prostate, stricture, or the condition known as villous cystitis.

Albumin.—This substance cannot in any way be considered a symptom of cystitis although present in nearly every case. Omitting the kidney as a source, this product may be found (a) wherever there is hemorrhage; (b) where in the absence of

DIAGNOSTIC TABLE OF INFLAMMATORY DISEASES IN AND AROUND THE NECK OF THE BLADDER.

	CYSTITIS.	ACUTE POSTERIOR URETHRITIS.	PARENCHYMATOUS PROSTATITIS.	FOLLICULAR PROSTATITIS.	VESTICULITIS.	TUBERCULAR CYSTITIS.	IRRITABILITY OF NECK OF BLADDER, NON-INFLAMMATORY.
Frequency of Urination	In acute condition, every 15 to 30 minutes in day and hourly at night. In chronic state, every hour and 3 to 4 times at night.	In acute, every 1½ to 2 hours in day and 2 or 3 times at night. Chronic, every 2 to 2½ hours by day and 1 or 2 times at night.	Same as former in day but 5 to 6 times at night. Chronic, every 3 hours on average, 3 to 4 times at night.	About as former, but at night as often as 10 to 15 times. Chronic, about normal in day, 1 to 2 at night.	Every 15 to 20 minutes when on feet. Nights, 4 or 5 times. Chronic, almost normal in day and possibly once at night.	At first every hour or so; gradual increase to every 15 or 30 minutes days, and 6 to 8 times at night.	At times almost incontinency, influenced greatly by surroundings and vocation. Sound of running water always acts as a cause for evacuation. Fright has a marked influence.
Pain	Constant in acute stage, but, fascinating as bladder expels last few drops. Chronic, very little at end of micturition.	Slight uneasiness, increased at end of urination. In chronic, none to speak of.	In acute, constant and increased as bladder empties. Chronic, only slight sensation at end of micturition.	In acute, constant tenesmus marked at contraction of the bladder. In chronic, very slight, if any.	Only slight uneasiness which is constant, increased somewhat at end. In chronic, practically none.	Very severe at end of micturition.	No pain whatever.
Pus	Always present, but as case becomes chronic, increased in quantity.	Same as former.	If abscess forms and breaks into urethra, quantity is increased and may follow last urine in considerable amount.	Last glass will contain small particles known as prostatic plugs.	Pus will follow urine as though coming from an abscess.	Urine full of pus; as condition becomes older pieces of cast-off tissue are found floating freely in urine.	No pus.
Hemorrhage	Acute, always present in amount 30 to 60 drops. Chronic, not usually perceptible to the naked eye unless stone, tumor or ulcer be present.	Acute, usually present in amount 5 to 10 drops. Chronic, rarely seen.	As in former, unless abscess breaks, when free flow for 2 or 3 times.	Same as in acute posterior urethritis.	Very seldom. Possibly pus may be tinged red.	Seldom absent but not usually in any quantity if irritation is avoided.	No.
Ammoniacal Urine	Not until case becomes very old unless complicated by some obstruction.	No. Unless complicated as in former.	Same as former.	Same as former.	Same as former.	Same as former, but develops later.	Liable to develop early.
General Symptoms	Acute, fever, chills, marked prostration. Chronic, salowness, disturbances of nervous system.	Possibly slight rise in temperature in acute condition.	None to speak of unless abscess develops, when same as abscess of any other part.	None to speak of.	Same as in acute cystitis.	Always rise in temperature. Cachexia and marked nervousness.	Patient is of a nervous temperament. Slight nervous disturbances usually present.

hemorrhage, the inflammation has been of a severity that the deeper layers of epithelium have been or are being cast off, thus allowing a transudation of serum from the vessels. This being a well proved fact, it must be evident that albumin in the urine may have its origin anywhere from the meatus upward.

General Symptoms.—These depend entirely upon the condition present and the cause thereof. In acute cases the usual symptoms of inflammation are present, such as chilly sensations, fever and the like. In the chronic condition there may be no symptoms, other than a sallowness, irritability due to the effect on the nervous system caused by broken rest, pain and the like. When the condition is due to malignancy, as tuberculosis or cancer, the usual cachexia soon develops, together with a slight rise in temperature, loss of flesh and a feeling of lassitude.

Differential Diagnosis.—To be successful in the treatment of cystitis it is absolutely necessary that the true condition be ascertained. Special care must be exercised to differentiate from the acute posterior urethrites, for the reason that the advised treatment of inflammation involving the bladder acts as a powerful irritant when used in the above condition. Tuberculosis of the bladder is also considered for the same reason, for in this condition, except as a diagnostic agent, washing of the bladder and especially with silver is contraindicated.

TREATMENT.

The treatment of cystitis should be carried on from the following standpoint: (1) the cause; (2) relief of distressing symptoms; (3) rendering the urine bland and unirritating; (4) control of inflammatory process; (5) general treatment.

The cause of cystitis must be ascertained in every case, yet I do not intend to advocate, but rather to firmly condemn searching an inflamed bladder for tumor, stone, or foreign bodies of any kind. With our present knowledge of the urine and a careful history of the case, I think I am safe in saying the above-named conditions are generally ascertainable. The same may be said of tuberculosis, and here the treatment so differs from other forms that where a positive diagnosis is possible, and instructions to follow carefully carried out, life may not only be prolonged but much suffering avoided. Where stricture, stone or foreign bodies are the causative agents, these should be removed at once, the remaining inflammatory conditions being treated as noted under headings. Having elucidated the more important general considerations, perhaps I can make myself more clearly understood by drawing upon imagination for a few cases not unusual in the clinical history and which, I will treat in accordance

with the principles already laid down in this paper. It will not be denied that every case, though to a certain extent a law unto itself, in a general way, will be found to follow, for the most part, a well defined course.

HYPOTHETICAL CASES.¹

1. Diagnosis acute cystitis, no evidence of previous bladder trouble, stone, tuberculosis or the like, but patient has chronic gonorrhea, and has had sounds passed, one only 48 hours ago. *Treatment*.—After thorough evacuation of the bladder, a lukewarm solution of silver nitrate (distilled water must be used), 1-16,000 is placed in the bladder without a catheter by aid of the Ultzmann-Dowd syringe. The same treatment should hold good in all cases from acute infection whether from within or without, male or female (a sterilised glass catheter should be used in the female), excepting tuberculosis. In these conditions no medication seems necessary as the most beneficial results should be obtained in a few hours. For the sake of argument let us imagine this case becomes chronic and accompanied by the following symptoms: urination averaging every hour, slight pain, with bleeding, urine very acid and containing an excess of uric acid. I would prescribe the following:

R	Ext. hyoscyami	gr. j.
	Ext. belladonnæ	gr. 1-6.
	Tr. cantharidis	m. j.
M. ft. pil. No. 1.		

This can be given every 3 or 4 hours. Although not absolutely necessary in every case, a most valuable adjunct is the addition of uriseptin in two teaspoonful doses. In this condition it may be of decided advantage to curtail the diet to a certain extent. All articles known to be rich in uric or oxalic acid producing elements should be interdicted. Irrigation should be continued about every third day, increasing the silver in strength as 1-12,000, 1-10,000, 1-8,000, and so on. The same condition when dealt with in a haphazard manner may reach a stage known as villous cystitis, or ulceration of the bladder; mucous membrane may develop, one of these being located at and involving the internal sphincter,—a condition which I have heretofore described as fissure of the bladder. These, of course, are quite rare conditions, and as I am dealing with the most common varieties, I will not pursue further this portion of the subject.

2. Patient aged 55, has a hypertrophied prostate, stricture, (10 F.), in the deep urethra, urine always contains a large

1. The hypothetical cases, although placed under three headings, will be found to include practically all inflammatory conditions of the bladder.

amount of pus, showing a chronic inflammation of the posterior urethra, bladder, and kidney pelvis. This condition has existed for years. Seventy-two hours ago, after severe wetting of the feet, retention results. In attempting to relieve himself, patient breaks the catheter, a small piece being left in the bladder. The passage of this instrument served temporarily to dilate the stricture, but in 24 hours acute cystitis develops. *Treatment*.—External urethrotomy with division of stricture, removal of foreign body, thorough washing of the bladder with silver nitrate solution 1-16,000 after which a tube (No. 30 F.) should be placed in the bladder for drainage. The following is prescribed:

R	Ol. sant. albus	m. 15.
	Uriseptin	3 ij.
S.	—Every three hours in a glass of water.	

Once daily thorough washing of the bladder with formaldehyde solution 1-5,000, and every third day silver solution in increasing strength should be used. Diet should be as far as possible devoid of uric acid producing substances, yet not curtailed sufficiently to in any way weaken the patient. Drainage should be continued until the urine is fairly free of pus, when the tube can be withdrawn allowing the wound to heal, the bladder treatment being carried on from the meatus. At the same time the stricture must be looked after to prevent re-contraction.

3. Frequency three or four months, no instrumental interference. Suspicion of tuberculosis. Bladder capacity, 3 ounces. Silver solution 1-16,000, as the test agent causes severe pain, the patient telling afterward, this lasted for 20 to 24 hours.

Creosote valerinate, 3 minims, gradually increased to 10, three times daily. Rest being disturbed somewhat, the following pill will be found serviceable:

R	Ext. hyoscyami	gr. j.
	Ext. belladonæ	gr. 1-6.
	Morph. sulph.	gr. 1-10.

Given at bed time.

All instrumental interference and bladder washing should be avoided, remembering that these not only aggravate the condition, but cause increased suffering. Let us imagine this case comes second-handed and has been cystoscoped, catheterised, and in other ways maltreated, the patient is passing urine every 15 minutes with quite severe pain and some free bleeding. Here we have a case of what may be termed mixed infection, that is, not only tuberculosis, but simple inflammation due to direct infection. In this condition silver 1-16,000 used once or twice, although pro-

cluding quite severe pains, has a most beneficial action. The diet here should be as far as possible free of substances known to cause highly acid or concentrated urine. Under no consideration should the bladder be opened, unless stone or foreign body be present, or as occasionally happens a few weeks before death, frequent with severe pain is most distressing, then draining will bring the end more peacefully.

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Modern Management of Inflammation of the Middle-Ear and Contiguous Structures.

By F. PARK LEWIS, M. D., Buffalo, N. Y.

THE anatomical relationship of the middle-ear and its adnexa are of first importance, primarily because of their nearness to vital structures, and secondarily because the destruction of any of its essential parts means permanent impairment of an important special sense. The contracted space occupied by the tympanum allows very little room for accumulated products of inflammation as the capacity of the normal cavity would ordinarily contain less than half a dram. The only normal outlet and inlet is the eustachian tube which is designed as an air conductor, and does not readily permit the passage of a dense fluid; there are, however, openings connecting the air cells of the mastoid antrum and passages for the bloodvessels extending into the brain structure and the vascular supply.

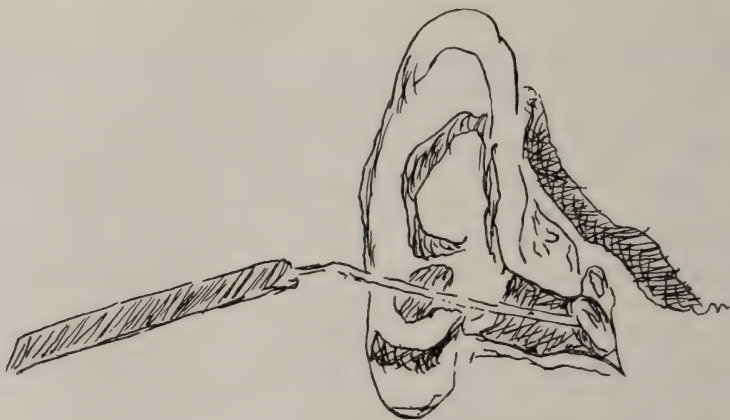
The structures within the drum include on its inner surface the bony channel in which is enclosed the facial nerve, and the semicircular canals protecting the delicate tissues of the nervous structure of the inner ear within the skull; and immediately under the mastoid cells is the lateral sinus, but the anatomy is so inconstant that its exact location may never be exactly pre-determined. A thin shell of bone separates the attic of the tympanum from the speno-temporal lobe of the brain.

It will be readily understood, therefore, that the accumulation of pus in this narrow space, with vitally important structures on every side, demands immediate and skilful treatment with the possible alternative of consequences most disastrous. The tympanic membrane is a dense, leathery structure; in a condition of health is capable of supporting great pressure, and fortunately it is exceedingly sensitive.

An acute inflammation of the middle-ear is, therefore, manifested by that great *conservator naturis* warning of coming trouble,

great pain; a simple inflammation shows at first under proper illumination red lines running along the handle of the malleus. This increases if uncontrolled until the whole membrane becomes rosy red; a secretion is poured out in the little drum cavity, serous at first, soon becoming purulent, and then if the drum membrane is examined through a speculum it is found that its curvature has been altered. It is now swollen outward from the pressure from within, and the pain which neither local adjuvants nor internal anodynes will wholly control has reached its acme, and rupture of the membrane is imminent.

There is but one important procedure at this point. The drum must be opened, a clean incision extending down to its base being



SKETCH 1.—Method of opening membranum tympani; after Dench.

made by an exceedingly sharp and narrow needle-pointed knife. The relief is often immediate. An outlet has been found for the pent-up secretion, and the cleanly divided edges are left in the best possible position for subsequent repair. The resistance of the strong drumhead, should this not be done, may lead in exceptional cases to the diversion of the pus to other channels, and involvement of the mastoid may follow. This is especially likely to be true in young children, where the bony connections are less firmly attached. The following unusual case is illustrative of this point:

A BEZOLD MASTOID CASE.

An Italian child fourteen months old was brought to my clinic at the Charity Eye, Ear and Throat Hospital, and seen by Dr. J. J. Finerty, by whom my attention was called to red, painful swellings behind the ears. An examination of the membranæ

tympani showed them to be dull and pale. There was little change in contour. The child, however, had swollen pus glands on the neck, and it was so evident that the origin of the trouble was the middle-ear that both drum heads were incised when a plentiful discharge of pus followed. Under treatment of the middle-ear and repeated incisions of the drum heads as they closed from time to time, the mastoid swellings gradually disappeared, and when, finally, after about four weeks the discharge had wholly ceased, both tympani and mastoids were left in a perfectly normal condition.

If an acute middle-ear inflammation can be treated early enough, incision of the drum may be avoided, but the ordinary measures recommended in the books are not effective. While sometimes useful, local depletion has usually but little effect on the deeper congestion; in the earlier stages cold applications or antiphlogistine may be helpful, but the preparations of laudanum or other anodynes serve but to mask the real condition.

The local treatment which I have found of greatest value in acute inflammation before pus has formed is the following:

R Cocaine hyd.....	1
Adrenalin chloride.....	2
Glycerinæ.....	4
Aquæ dist.....	30

Sig.—Drop in the ear warm, every half hour or oftener if necessary.

The adrenalin constricts the vessels, and helps in the absorption of the cocaine, which of itself is not taken up freely by the dermal drum surface. The glycerine causes a serous transudation, still further relieving the congested vessels and the combination which is based upon the known action of the drugs will give relief from pain almost immediately when other medicaments seem to be wholly inert.

The treatment of chronic discharges is again a serious matter. Whether or not we are to have a chronic flux will depend in no small degree on our treatment of the primary inflammation. If a free opening extending to the bottom of the tympanum be made in the membrane and the ear be cleaned with a mild antiseptic, such as borolyptol, the cessation of the discharge will probably be followed by a healing of the wound and a complete restoration of the integrity of the membrane. If, on the other hand, the incision is small or the membrane be allowed to rupture from the pressure of the contained secretion, the wound is often a jagged tear, the discharge erodes its edges and shortly a tympanic opening results which from its nature will prove difficult if not impossible to close. The reasons for the difficulties met in controlling a chronic

suppuration from the middle-ear are due to its anatomical form, and a failure to bear this in mind when its treatment is undertaken. The form of the external aural canal, it will be remembered, is that of a curve. The highest portion is usually in the middle. A perforation in the drumhead is often not quite at the bottom, and even if it is at the lowest part of the canal the tympanum sinks a little below its edge. The subjoined sketch will show it in effect.

If now a chronic inflammation involves the secreting surface of the tympanic cavity the mucus discharge settling in the bottom of the warm, moist nest, forms a perfect culture medium for the various infectious germs that readily gain entrance through



SKETCH 2.—Pus filling middle-ear to level of perforation.

the perforated membrane. If, as is quite common, syringing be employed, either by the patient or the physician, under usual conditions a little lake is left behind, and this very soon becomes alive with the various cocci that have not been destroyed, and that grow and multiply even more rapidly than before.

It is, therefore, surprising in view of this palpable and self-evident fact that so great an otologist as Bezold, in a recent article in the *Archives of Otology*, translated by Dr. Arnold Knapp without comment, should decry the most reasonable and efficient method of treatment yet devised, i. e., the wide siphon drainage. In this paper he insists that the gauze becomes saturated and offensive, and by its retention acts as a septic poultice, increasing the condition which it is designed to relieve. This would, of course, be true if the very essence of this method were not in the frequent replacement of the gauze. Its method of action can be more graphically shown by a sketch than by a description.

If the gauze be applied in this manner after thorough antiseptic cleansing of the external and middle-ear, followed by drying with absorbent cotton, the pus is drawn from the middle-ear, which is left in the best possible condition for normal healing. Every detail, however, must be carefully considered. If a granulation exist it must be dexterously removed by cautery, forceps or snare. For preliminary cleansing nothing is more efficient than menthoxol or camphoroxol 1-to-10, followed by lysol 10 to 15 drops in a bowl of warm water. This may be used carefully with a syringe if the discharge is profuse and if a complete drying follow.

The most effective gauze to be used is iodoform, but if one would avoid the disagreeable odor, perhaps equally effective and



SKETCH 3.—Antiseptic gauze in position to siphon fluid from middle-ear.

far pleasanter to use is the bismuth formic-iodide gauze prepared by the Mulford Co. The efficiency of this method is so great that case after case of chronic otorrhea has completely recovered under its employment in my hands. As a local measure in acute suppurative cases threatening mastoid involvement and even when the mastoid had been markedly affected, the newer silver salts have had a most pronounced effect.

ABORTING ACUTE MASTOIDITIS. .

One hesitates to speak of the possibility of aborting acute mastoiditis very much as one is reluctant to urge any measures looking to the aborting of glaucoma or appendicitis, because of the fear that those who are not judicious may carry conservatism beyond the point of safety and court disaster. The otologist, however, who watches the blood, the temperature and the patient will know when it is no longer wise to wait and none other should take the responsibility of caring for a patient with a swollen mastoid or an angry middle-ear. The following two cases in this light are instructive:

A ten year old girl with adenoids was taken with acute inflammation of the middle-ear while being treated for measles by Dr. Wm. H. Marcy. The drum membrane had broken and the discharge was profuse before I was called. Suddenly the temperature, which had been only slightly elevated ran up to 103 degrees and the mastoid became painful. The ear was kept cleansed and then filled with a 25 per cent. solution of protargol; the discharge gradually decreased and the temperature dropped one degree daily until by the time that she was well enough to leave the house, in about two weeks, the ear was fully restored to its normal condition.

Of course, I removed the adenoids at an early date. So important an element in the production of middle-ear disease are adenoids, that it is frequently impossible to cure the former until we have secured suitable ventilation of the cavity by the removal of the pharyngeal obstructions, and it must be further borne in mind, that when children suffer from repeated earache, an obvious or concealed lymphoid hypertrophy may be looked for with every expectation that it will be found.

The second case was one of greater interest for two reasons: first, the rapidity with which resolution followed active measures; and, second, a peculiar feature involved in the treatment. A purulent otitis had been for two months under the care of a skilled otologist when the mastoid became involved. The membrum tympani had been freely opened but the pus poured from the meatus almost as rapidly as it could be removed. The neck was so swollen and stiff that the head could with difficulty be turned. The blood test showed abundant leucocytosis, and the patient, a man of 35, was exceedingly ill. It seemed impossible that a mastoidectomy could be avoided, but as it was late in the day he was sent to the hospital and immediate active treatment instituted.

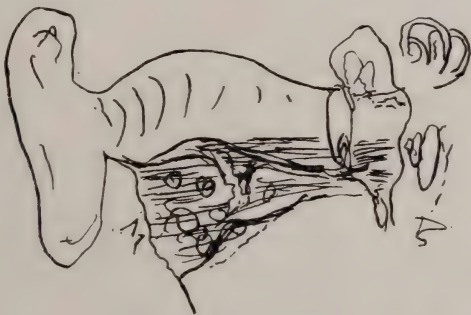
The ear was cleansed in the manner previously described, and the meatus filled with a 25 per cent. solution of protargol and gently worked into the deeper tissues by slight pressure on the tragus. In the morning he was so much improved that the treatment was continued. In six days he was discharged with a healed drum head and practically well.

In addition to the local measures the important element in his treatment was the almost total withdrawal of all food. During the six days, he had three times daily, only 100 c.c. of cold milk, so that he took during the six days but two quarts of milk altogether. Water he was allowed ad libitum, but no other nourishment of any character whatever. At the time of his dismissal he was in better physical condition than at any time during the previous two months.

The effect of limiting the food supply in this case was so marked that it will certainly be worthy of careful study in all cases

in which we have elevated temperature as a result of a retention of toxic products.

When, however, we have pus formation in the mastoid as a result of chronic disease of the middle-ear, with obstruction of the outlet or percolating below the coil of the tympanic opening operative intervention may not longer be postponed. A case which was under my care many years ago in which bony necrosis followed chronic suppurative inflammation of the middle-ear with pus absorption without mastoid involvement, leading to absorption of pus products into the cerebral circulation with sinus thrombosis and death, impressed me profoundly with the danger which always accompanies bone disease in this locality. At that time, the classic works of Schwartze and Stacke, and



SKETCH 4.—Erosion into mastoid through external canal.

Macewen had not been given to the world and operative measures were postponed too long, hence when undertaken were not directed as they would be by our later and fuller knowledge of the probable sequence of events.

A school of German otologists adopts the rule formulated by Bezold that "acute purulent otitis which has existed for more than two months even without complications, is sufficient indication for me to operate" (by opening the mastoid); while it is frequently true that mastoidectomy becomes in such cases ultimately necessary, the method of treatment which I have outlined, especially the use of siphon drainage and protargol of proper strength worked into the deeper portions of the ear after a sufficient opening has been secured in the drum head, has made this with me, far from the general law, but rather the one of many exceptions. At the same time the danger of postponing too long, operative intervention must not be overlooked. The following cases will illustrate in brief the course which such cases may take:

Mrs M., a bride of two months, 25 years of age, had been suffering great pain in ear, profuse discharge, little soreness over the mastoid, free opening in tympanic membrane. In this case persistent treatment failed to control the discharge or relieve the pain.

After two months suffering she was sent to the hospital, where subnormal temperature, faintness, and nausea increased anxiety as to her condition. She then was found to be pregnant.

Under chloroform anesthesia I opened the mastoid, which was found filled with pus, the cells of the antrum had broken down and the cavity was filled with debris. This was thoroughly curetted, and left clean and aseptic; she made a normal and complete recovery.¹

Under like circumstances I should not delay operation so long, as the pressure of pus in the mastoid was almost a foregone conclusion.

Mr. K., of Depew, for several months had an ear discharging pus with extensive swelling above and behind the auricle, the swelling having a fistulous opening. Operation in this disclosed a channel running down to the external canal and leading through carious bone into the antrum. It was easy, therefore, to follow the course of the disease back into the antrum which was opened in accordance with the proper surgical methods, and recovery was rapid and satisfactory. Bony necrosis of the antrum in diabetes is usually fatal in its termination.

Mr. G., at 60, in whom a right sided mastoid abscess had followed a sharp attack of grippe refused all operative measures until it became evident even to him that surgical intervention was necessary. An exposure of the bone developed necrosis of the entire mastoid portion of the right temporal bone, and the whole of the right parietal. The operation was long and protracted; meningeal inflammation followed resulting in death.

The necessity of a correct analysis of symptoms is shown by the following case:

Miss R., from Pittsburg, while travelling took a severe influenza involving both ears. Acute suppurative inflammation necessitated repeated tympanic punctures, but notwithstanding every possible effort the drum head grew soggy, the external canal exquisitely tender, and the mastoid sore. Temperature subnormal with occasional elevations most suggestive of sepsis; she felt sick and weak. At no time, however, did a mastoidectomy seem warranted. One afternoon after an especially poor report in the morning, I was hastily summoned by a telephonic message that my patient was numb on one side, had vomited and was not

1. A curious feature was an indentation over the left mastoid of the child corresponding to the site of operation in the mother.

seeing clearly; I hastened to her bedside after sending a hurried message to the hospital to have the surgery immediately prepared for an operation only to find her perfectly comfortable, the numbness having disappeared and the nausea having been relieved by vomiting; she then told me that she had frequently had like attacks before her ears had been affected. She was suffering from an attack of scintillating scotoma, which was evidently wholly disconnected with the disease in her ears. She recovered satisfactorily and completely with perfect hearing without any further operative intervention whatever.

The conclusions to which such cases lead us, are that every otitis demands careful individual attention and close clinical observation. Judicious local treatment will in a large number of cases render unnecessary operations which are never simple, which may be dangerous, and which are always protracted in healing. But when operation is required, it should be done sufficiently early to prevent involvements which may prove fatal, and it should be done thoroughly. It has to do with the most vital structures of the human body, and abnormalities of formation are exceedingly common. It should never be undertaken, therefore, except by those who either on the cadaver, by observation, or by experience have familiarised themselves with the bony anatomy and the technique of the operation and in the hands of such, mastoidectomy is an operation no less valuable as a life saving measure than is the somewhat analogous abdominal operation, that for appendicitis.

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SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine

Section on Medicine, January 12, 1904.

REPORTED BY WM. IRVING THORNTON, M. D., Secretary.

The regular meeting of the medical section of the Buffalo Academy of Medicine was held at the academy rooms, Public Library Building, Tuesday evening, January 12, 1904. The meeting was called to order by the chairman, Dr. ARTHUR W. HURD, at 9 p. m.

Dr. SIDNEY A. DUNHAM presented a case which he had treated with the x -Ray for epithelioma of the lower eyelid. There was no recurrence one year after treatment.

Dr. LUCIEN HOWE presented the paper of the evening, entitled,

ARE WE AS PHYSICIANS CARRIERS OF CONTAGION?

* He believed that laws should be enacted compelling physicians to use proper disinfection of their persons after attending contagious diseases. He recommended that the state bacteriologist determine a standard method of disinfection and that physicians be made liable for malpractice for neglecting the same. A number of instances were cited showing that physicians and surgeons had been the means of spreading contagion.

Dr. H. W. WILLIAMS in discussing the paper referred to Oliver Wendell Holmes's essay on puerperal fever, showing a clear case of infection from the cadaver to the puerperal woman. He believed that we should have considerable more information in regard to the nature of the exanthemata before enacting exact laws. Medical men and students should be instructed in the methods of proper disinfection.

Dr. THOMAS B. CARPENTER spoke of an epidemic of puerperal fever in Buffalo, which compelled a number of physicians to give up their obstetric practice. He said that 1 to 5 per cent. of healthy individuals have the Klebs-Loeffler bacillus in their throats. During an epidemic of diphtheria in a certain town 35 per cent. of the inhabitants had these germs present without any symptoms. In the General Hospital the internes in charge of the contagious ward have the germs almost invariably present. These individuals may convey a virulent form of the disease to a susceptible individual. He did not believe that physicians carried much contagion at present and opposed any legislation in the matter at this time.

Dr. Dunham mentioned an instance where he believed he had carried measles home to his own family.

Dr. J. HENRY DOWD believed that physicians carried contagion and cited an instance. He does not sterilise sounds and never had an infection occur. He simply cleans them with a sterile towel.

Dr. F. E. BLAAUW opposed legislative action in the matter of disinfection.

Dr. E. C. W. O'BRIEN who had charge of Buffalo's small-pox epidemic in 1872, stated that he had come in contact with 1,700 cases and was very sure that he never conveyed the disease to another. In all but six cases the origin of the infection was traced and in no instance could a physician be held responsible. While in the quarantine hospital he kept his hat on and

coat buttoned. Before leaving he washed face, hands and moustache in a strong solution of carbolic acid. On leaving the hospital he unbuttoned his coat and did not enter another house for an hour.

Dr. F. THOMA reported conveying measles to a case of scarlet fever and bringing diphtheria to his son after incubating. He did not believe laws are required.

Dr. A. W. HURD stated that the evidence is against much spreading of contagion by physicians and that the enacting of laws as suggested by the essayist would do more harm than good by keeping people from calling physicians in these cases.

In closing Dr. Howe said the point was carried if one individual case could be proven. He believed that young physicians could be found who would devote their entire time to this class of cases.

Meeting adjourned at 10.30 p. m. Members present, 19.

PROGRESS IN MEDICAL SCIENCE.

Genitourinary and Syphilitic Diseases.¹

CONDUCTED BY NELSON W. WILSON, M. D., Buffalo, N. Y.

Genitourinary Surgeon to the Emergency Hospital.

A YOUTHFUL GONORRHEIC.

GONORRHEA in the young is not so rare a disease as to excite comment or be worthy of more than passing mention because, as, in almost all cases, the method of infection can be traced to an extrasexual source. A careful search of all the available records, however, fails to reveal a case of gonorrhea, acquired in the usual way, in so young a person as the one herewith detailed, which was recently under the reporter's care at the Emergency Hospital. The patient, a boy aged nine, was poorly nourished and had the acutely developed cunning of a child of the streets. His home was in the lower section of the city both literally and figuratively, and his career has been the usual neglected life of such a child, whose parents gave him but spasmodic attention either moral, physical or mental. His appearance was that of the typical Italian child of nine years; his name was richly Irish and the apparent contradiction of sloe-black eyes and hair, Latinised features, and Gallic name was due to the fact that his mother was Portuguese and his father Irish.

This boy was received at the hospital in considerable pain because of his inability to urinate. His bladder was greatly distended and he said he had not urinated since the night before, it then being 11 o'clock in the morning. His penis was edematous, swollen, reddened and phymotic. The history in brief was that he had been under a physician's care the day before, that an effort had been made to catheterise him without success, and he had been recommended to the hospital for surgical treatment. An examination of his penis showed the presence of a large quantity of suspicious pus, which was stained and found to contain gonococci. His condition required immediate relief, hence, irrespective of the danger of carrying infection to the posterior urethra, the phimosis was cut and a catheter inserted into the bladder. A large quantity of cloudy urine was drawn and through the catheter he was given a bladder wash of permanganate of potash 1 to 8,000. His temperature was 102.4. He was put on urotropin .195 three times a day; he was catheterised every six hours and given a permanganate wash at the same time. His temperature rose within the next three days to the neighborhood of 105° and he could not voluntarily pass urine. On the fourth day he was put on uriseptin, a teaspoonful every three hours in hot water, and the urotropin was discontinued. The next day he urinated voluntarily but with some pain. His treatment now consisted of permanganate washes every six hours, increasing the strength gradually, and uriseptin internally, his bowels being kept open with salines, and he was put upon light diet.

From the time the uriseptin was given he began to improve, his urination became less and less painful and he made a rapid recovery, the gonococci disappearing during the sixth week after his admission. In the beginning he denied any sexual connection, but persistent questioning revealed the fact that he had enjoyed the society of a girl of twelve. This was so unusual that curiosity led to a visit of investigation, which disclosed the fact that the girl in question was gonorrhoeic and had been so for some time. The infection appeared to be prevalent in the neighborhood among the younger ones, and further investigation revealed its source to be a woman of public affection and of nymphomaniacal tendency.

This case is reported in narrative form because a detailed report would consume more space than is at command. The extreme youth of the patient and his acquired gonorrhea by the sexual route makes it interesting, as does the question which naturally arises as to whether he would have succeeded in his love affair at so early an age, had he not had in his make-up, the soft speech of the Irish, combined with the passion of the Portuguese.

SUPRAPUBIC PROSTATECTOMY.

IN THE *Lancet* of recent date Sir William J. Collins reports a suprapubic prostatectomy in a man of seventy-one, who for two years had been suffering the torments of catheterisation. Under chloroform the bladder was irrigated and distended with warm boracic solution. Through a suprapubic incision a finger was introduced into the bladder and the membrane over the prostate stripped through. The gland was enucleated and, with two fingers in the rectum, was removed without further injury to the membrane. Hemorrhage which was not great was controlled with hot boracic solution. A drainage-tube was made fast in the suprapubic opening and a catheter inserted through the urethra. The latter was taken out on the second day because of irritation. In thirty-six days the suprapubic wound was healed and the patient discharged, cured of the condition for which he was operated.

This is the Freyer method and Collins advocates it. Why, is not apparent when one considers the excellent work done by American surgeons by the perineal route? Dr. Park's series of recent cases at the Buffalo General Hospital show an equally safe and satisfactory outcome. A late case was that of a man of seventy-six, who was received practically in a hopeless condition. He was suffering with uremic poison to a marked degree; his mind wandered for weeks prior to his admission; his urine had been dribbling and was extremely offensive. His case was complicated by the presence of multiple strictures of the urethra which had existed for many years.

Dr. Park did a perineal prostatectomy and removed a very much enlarged gland, fibrous in character; he also did internal urethrotomy after dividing the deep strictures externally, and left perineal drainage. The patient improved mentally for a few days and then returned to his former condition of flightiness. His urine showed no reason for the mental condition, and 33 centigramme doses of iodide of potash three times a day cleared him up in a few days and he was discharged cured, with the ability to control his urine. The suprapubic route is neither the route of common acceptance nor mechanics. In certain cases it is permissible and in very few others advisable. The consensus of opinion is largely in favor of perineal prostatectomy.

ACUTE RHEUMATISM.

R Tongaline 5viii.

M. Sig.—A teaspoonful four or five times a day until pain is relieved. Then a teaspoonful three times a day.

ABSTRACTS.

Exodin, a New Purgative.¹

By PROF. WILHELM EBSTEIN, Göttingen.

EXODIN, the diacetylrufigallic-acid-tetramethyl-ether, is a yellow powder melting at 180 to 190° C. It is odorless and tasteless, insoluble in water and with difficulty dissolved in alcohol. Since January, 1903, I have experimented with it very extensively in the University and in my private clinic as well as in consulting practice. This paper is based upon numerous histories of more or less obstinate constipations in males and females of all ages.

The remedy never causes unpleasant by-effects, such as dyspeptic symptoms or eructations. It usually acts in from 8 to 12 hours. The unpleasant diarrheal discharges produced by many otherwise effective purgatives are absent with exodin. In most cases the first passages are mushy and even solid. In the course of the next few hours there are usually from one to three more passages, the last not infrequently being thin. The feces preserve their natural color. In extremely rare cases the first evacuations are diarrheal; entirely watery discharges were hardly ever observed. Once in a while the remedy may be ineffectual, but this is wholly exceptional.

The action of exodin is midway between laxative and purgative. It can be used as an evacuant in simple constipation in otherwise healthy persons and also when sluggishness of the bowels is an accidental complication or a part of some other affection. In pregnancy, even during the first two months, exodin has, when all other laxatives failed, proved very efficacious and harmless, causing evacuation of abundant stools without any trouble. The use of the drug at intervals showed that it is always equally active whenever readministered.

For obvious reasons, a universal purgative suitable for all fecal retentions, will probably never be discovered. But the properties which exodin exhibits enables me to welcome it as a valuable purgative. To find the indications for constipation remedies requires especially a careful abdominal examination. In my book on Chronic Constipation I have gone fully into all the points involved. There is too much routine prescribing done here; those who are perpetually talking and writing against quackery must not forget the importance of depriving the quacks of their weapons.

1. From the Göttingen University Medical Clinic; read before the Göttingen Medical Society, December 3, 1903; abstracted from the *Deutsche Medizinische Wochenschrift*, January 1, 1904.

Too much must not be demanded of exodin. We cannot expect the intestines to react at once to the purgative in cases of old chronic coprostasis, which is kept up by hard and dried scybalæ accumulated in the large intestines; or in spastic constipations in which the spasm of the intestinal muscles prevents defecation; or where paralytic conditions cause the retention. When the intestinal canal is weakened, its refusal to perform its functions becomes more and more obstinate as we irritate it, either by large doses of mild purgative or by the always reprehensible method of employing so-called drastic evacuants. When hardened fecal masses are accumulated in the large bowel and purgatives are ineffectual, the so-called high oil enemata are indicated. But the acid contents of the oil, increased though it is in the gut, is not infrequently unable to irritate the large intestine sufficiently to cause the expulsion of the feces. To aid in this, I employ purgatives which I call "propellers," and which are extremely important in the treatment of chronic coprostasis. A proper combination of the oil with them must be made, care being taken to strengthen and not to weaken the intestinal action. In my book already referred to I gave a list of the propellers at that time known to me.

The result of very extensive experimentation with Boudard's recinine pills has caused me to reject them. But exodin has done me excellent service as a "propeller"; since I began using it for that purpose I have completely given up calomel and castor oil. Frequently 15-grain doses of the remedy have sufficed, with oil enemata, to secure satisfactory evacuations.

Over purgatin and emodin (see my report on both remedies in the *Therapie d. Gegenwart*, Jan., 1902), exodin has the advantage of greater efficiency, results being obtained with smaller doses. Besides, it does not make the urine stain, to which women, for readily understood reasons, so strongly object. Patients suffering from the severest forms of chronic constipation who had tried all possible remedies and whose judgment was unimpeachable, preferred exodin on account of its prompt, painless and efficient action to all other medicaments.

I made an extensive series of experiments with exodin, adding it to the oil enemata, but the administration by mouth seemed to act better. Exodin is marketed in the form of $7\frac{1}{2}$ -grain tablets, which are tasteless and odorless. One tablet is enough for children. Adults take from one to three tablets; two, however, are usually sufficient to produce one or several mushy stools within 8 to 12 hours. The tablets should be allowed to disintegrate in a suitable quantity of water and the mixture drunk under constant stirring with a spoon. Any exodin remaining in the glass

should be rinsed down with additional water. This method insures the introduction of the remedy into the stomach in the finest possible state of subdivision.

Beta-Eucaine for Local Anesthesia.

F. GREGORY CORNELL, M. D., Surgeon to St. Vincent's Hospital, Leadville, Colo., (*Annals of Surgery*, December, 1903,) says that local anesthesia is usually accomplished by freezing or by the injection of cocaine or analogous preparations. The former is most unsatisfactory, owing to the pain of the freezing and thawing and the tissue changes which it causes. The chief reason for the existence of the cocaine substitutes is the danger with cocaine of systemic poisoning from its absorption. Out of 250 reported cases of cocaine poisoning, thirteen terminated fatally. The author himself had three cases of evil effects in a series of fifty cocaine injections, while in a series of over eighty cases in which beta-eucaine was the anesthetic used, no such symptoms were manifest.

Beta-eucaine has for its most characteristic and advantageous features the following: (a) nontoxicity, the fatal dose being between 6 and 7½ grains per 2 1-5 pounds of body weight, there is practically no possibility of such a dose being injected in the course of an ordinary anesthesia; (b) it may be sterilised by heat without the loss of any of its properties; (c) it will not deteriorate or decompose with keeping; and (d), it will not increase the tendency to hemorrhage to any marked degree; vasomotor paralysis and secondary hemorrhage occur less frequently than with cocaine. These points have been most influential in placing beta-eucaine as the local anesthetic of choice, and its use is being rapidly increased.

The author further advocates infiltration anesthesia according to Schleich and that according to Braun, the latter combining adrenalin with cocaine or eucaine for this purpose. This combination has the advantage of a hemostatic action and of intensifying the anesthesia. Regional anesthesia is also highly recommended. It is the injection of 1 to 3 per cent. anesthetic solution into the sensory nerve that supplies the field of operation, usually at a convenient point between the central nervous system and the site of operative interference, though in some cases the nerves may be injected when exposed in the operative wound. A combination of infiltration and regional methods is usually employed, the former for the skin and the superficial parts and the latter by the direct injection into the nerve. When it is inconvenient to

expose the nerve by dissection, an injection into the perineural tissue will, as a rule, be found ample and sufficient. The injection should be made into the region of the nerve to be interfered with and the nerve surrounded by what Matas terms an "anesthetic atmosphere." This "blocking," as shown by the splendid work of Crile and of Cushing on the subject of shock, also prevents centripetal impulses from reaching the center, thus removing one of the most important, if not the chief, causes of shock.

The advantages of local over general anesthesia are readily apparent. The former should be used as an adjuvant to, when not possible as a supplanter of, the latter. As von Mikulicz has said, "the question of today is not which is the safer anesthetic, chloroform or ether, but in what cases can local anesthesia be substituted for anesthesia by inhalation."

Methods of Formalin Disinfection.

SEMBRITZKI, of Königsberg (*Therap. Monatshefte*, November, 1903,) says that formalin is most effectively and conveniently used as pastils vaporised in the formalin lamp. Its employment effects both the inhibition of germ growth and deodorisation. It rapidly destroys the bad odor of waiting-, sick-, bedrooms and nurseries. It is wholly free from fire danger. The flame should be turned so low that but one pastil is vaporised in the course of a night. This causes no discomfort whatever. The author is greatly pleased with the action of the formalin lamp, not only in infectious diseases, but especially in affections of the respiratory organs, where air purification is essential, as in coryza, bronchial catarrhs, influenza, phthisis, and the like.

Especially brilliant results has the lamp given in whooping cough. The toxin of pertussis is still unknown, though its specific germ has been isolated; but it is doubtless present in the breath and sputum. Efforts have long been made to sterilise the air by ventilation, phenol, etc. Here formalin vaporisation renders the air antiseptic as well as aseptic. The author prescribes it for every case of pertussis and always has had excellent results; often the disease is cut short and generally it is rendered much shorter and milder. Similar experiences have already been recorded by Dr. Jezdik, of Prague (*Zeitung der böhmischen Aerzte*, September 14, 1901,) and Dr. Lamallérée, Varennes (*Revue Mensuelle des maladies de l'Enfance*, February, 1902,). If the vaporisation is carefully controlled, no irritation will be set up. The lamp should contain two or three pastils, the flame being kept very low. It is placed in the sickroom or

in an adjoining apartment. The room in which the patient is kept should be exchanged every day and the one not used should be well aired.

TOPICS OF PUBLIC INTEREST.

THE PROPOSED OPTOMETRY BILL.

By LUCIEN HOWE, M. D., Buffalo, N. Y.

ON the tenth instant,¹ Senator Wilcox introduced the following bill, which was referred to the Committee on Public Health. It is entitled, An act to amend the Public Health law by defining optometry and regulating the practice thereof.

SECTION 1. Chapter six hundred and sixty-one of the laws of eighteen hundred and ninety-three, entitled "An act in relation to the public health, constituting chapter twenty-five of the general laws," is hereby amended by inserting a new article to be article thirteen thereof and to read as follows:

ARTICLE XIII.

OPTOMETRY.

- SEC. 209-a. Definition; application of article.
- 209-b. State board of examiners.
- 209-c. Powers of board.
- 209-d. Examinations; certificates for practitioners.
- 209-e. Certificates to be recorded and displayed.
- 209-f. Fees.
- 209-g. Violations of article.

SEC. 209-a. Definition; application of article.—The practice of optometry is defined to be, the employment of any means, other than the use of drugs, for the measurement of the powers of vision and the adaptation of lenses for the aid thereof. The provisions of this article shall not be construed to apply to physicians duly licensed to practise medicine under the laws of this state, nor to persons who sell spectacles or eyeglasses on prescription from any duly qualified optometrist or physician, nor to dealers in spectacles and eyeglasses who neither practise nor profess to practise optometry.

SEC. 209-b. State board of examiners.—The state board of regents is hereby authorised and directed on or before July 1st, nineteen hundred and four, to appoint a board of examiners in optometry, which shall consist of five persons, who shall have been

1. February 10, 1904.

residents of this state actually engaged in the practice of optometry for at least five years and members of the optical society of the state of New York. For the purpose of such appointment said society shall nominate to said board of regents twice the number of examiners to be appointed, and thereafter similarly for each vacancy or new appointment. The term of each member of said board shall be three years and until his successor is appointed and vacancies shall be filled for unexpired term only; but in the original appointment of the members two shall be appointed for the term of one year, two for two years and one for three years from July 1st, nineteen hundred and four.

SEC. 209-c. Powers of board.—Said board of examiners shall, subject to the approval of the regents, make such rules and regulations not inconsistent with the law, as may be necessary to the proper performance of its duties; and each member thereof may administer oaths or take testimony concerning any matter within the jurisdiction of the board.

SEC. 209-d. Examinations; certificates for practitioners.—Every person desiring to commence or to continue the practice of optometry after January 1st, nineteen hundred and five, except as hereinafter provided, shall take an examination before said board of examiners to determine his qualification therefor. Every candidate successfully passing such examination shall be registered by said board of examiners as possessing the qualifications required by this article and shall receive from said board a certificate thereof; but any person who shall have been continuously engaged in the practice of optometry for more than two years next prior to the passage of this article shall be entitled upon submitting proof thereof to said board of examiners to receive from said board a certificate of exemption from such examination. Every person entitled to a certificate of exemption as herein provided must make application therefor and present the evidence to entitle him thereto, on or before January 1st, nineteen hundred and five, or he shall be deemed to have waived his right to such certificate. Any certificate issued by said board of examiners may be revoked by the board of regents after a hearing and upon due notice to the holder thereof.

SEC. 209-e. Certificate to be recorded and displayed.—Every person to whom a certificate of either registration or exemption shall be issued shall immediately cause the same to be recorded in the clerk's office in the county of his residence and also in the clerk's office of each other county wherein he shall then practise or thereafter commence the practice of optometry; every person practising optometry must also display his certificate of registration or exemption in a conspicuous place in the principal office wherein he practises optometry and whenever required exhibit such certificate to said board of examiners or its authorised representatives.

SEC. 209-f. Fees.—The fee for such examination shall be fifteen dollars; for a certificate of registration ten dollars, and for a certificate of exemption five dollars, to be paid to the board of regents and constitute a fund for expenses made necessary by this article. From the fees so paid, the regents shall cause to be paid all necessary expenses incurred in the administration of this article, including the reasonable compensation of the examiners for their services and their necessary expenses. The fee to be paid to the county clerk for recording a certificate shall be fifty cents.

SEC. 209-g. Violations of article.—Any violations of the provisions of this article shall be a misdemeanor and courts of special session shall have jurisdiction of all such violations. No person not a holder of a certificate of registration or exemption duly issued to him and recorded as above provided, shall, after January 1st, nineteen hundred and five, practice optometry within this state. The practice of or offering to practise optometry or the public representation of being qualified to practise the same by any person not authorised to practise optometry shall be sufficient evidence of a violation of this article.

SEC. 2. Article thirteen of the public health law, renumbered as such article by chapter two hundred and ninety-three of the laws of nineteen hundred and three, is hereby renumbered as article fourteen of said law.

SEC. 3. This act shall take effect immediately.

Senate, No. 378.

In attempting to discuss this bill it is necessary at the outset to appreciate the importance of a fundamental fact which is undisputed and familiar to all practitioners of medicine—namely, that certain imperfections of the vision, even though they can be improved temporarily by glasses are, often in reality, only symptoms of serious diseases of the eye itself, or of the general system. The recognition of these diseases requires some knowledge of anatomy, of physiology, of medicine, and especially of the methods of urinary analysis. If the person to whom such patients apply does not recognise these diseases, and if he contents himself with fitting glasses, he may give to the patient temporary improvement of the vision, but valuable time is lost, which may result in total blindness or in the serious illness, or even in the death of the patient. It is worth while illustrating this fact by one or two examples out of a very considerable number which might be selected.

Glaucoma is well known as one of the most dangerous diseases of the eye. Its earliest symptom is that the patient seeks to increase the strength of his glasses rather more frequently than

usual. At this stage the change in the eye itself is so slight that the disease may be easily overlooked. If it be recognised at that early stage and treated promptly and properly, the vision is saved in a very large percentage of cases. On the other hand, the greater the delay the more certain is blindness, absolute and total, which, moreover, is often accompanied by severe pain.

Again, while headaches and pain in the eyes are usually the result of so-called "eye-strain," on the other hand in certain instances these symptoms are not dependent upon the eyes primarily, but are due to derangements of the stomach or other internal organs, or, it may be, to an early stage of certain diseases of the brain.

If the person who prescribes glasses for headaches of this kind does not also recognise with some degree of exactness the existence of the disease in these other organs, or at least does not know the other symptoms characterising these other diseases, the patient is not only subjected to unnecessary annoyance and expense in obtaining glasses, but time is lost during which the patient might be receiving proper treatment for that portion of the body which is primarily at fault.

Or again, in the formation of cataract the vision decreases, and changes in the glasses are necessary. But certain forms of cataract are directly the result of diabetes. If the examiner is not sufficiently familiar with the symptoms of this disease and capable of making a urinary analysis, the diabetes is overlooked, its treatment by a physician is neglected, and thus life is endangered. Or still again, failure of vision is not an infrequent symptom of certain forms of Bright's disease. If the examiner is not able to make a chemical examination of the urine and thus recognise the real cause of the difficulty, very valuable time is lost in attempts to improve the vision, and the life of the patient is placed immediately and seriously in danger.

Other examples could be given to show how imperfect vision is only a symptom of more important changes which take place in the eye itself, or in some other organ of the body.

In view of this there seems to be no question but that any one who attempts to prescribe glasses should also have a knowledge of anatomy—at least of the eye,—of physiology, enough to recognise the relation between the eye and other parts of the body, that he should have a considerable knowledge of medicine and certainly a thorough knowledge of urinary analysis. *In a word, the prescribing of glasses is really a branch of the practice of medicine.*

The objections to the bill advocated by the Optical Society are:

First, that it does not sufficiently define what optometry is. It does not state what knowledge, if any, is required of the instruments to be used, other than to recognise what they are. It does not even require a regents certificate or any knowledge of optics.

Second, even if a thorough knowledge of optics were demanded, that would be entirely insufficient for the responsibility of prescribing glasses, unless a considerable degree of medical knowledge was added.

Third, the law already requires dentists and pharmacists, and, above all, physicians, to pass examinations, determined by competent judges, of the work required in their respective departments, and it is only right that those who propose to practise medicine under the name of optometry should also be obliged to pass medical examinations whose standard is determined not by special legislation, but in accordance with the system of professional studies already adopted in this state.

Fourth, it is unjust to physicians thus to lower the standard of medical education, and they have already protested against it.

Fifth, even if the bill passes, it does not give to opticians any greater privileges than they now enjoy, but on the other hand it does allow all sorts of frauds and fakirs to continue their practice just as at present, provided only they have done so for two years.

When preparing this bill the opticians sent to physicians a circular letter, the wording of which was such as to indicate that the bill was an effort to raise the standard of practice in optometry. They enclosed a postal card asking physicians who favored the bill to return the card with an expression of approval. A considerable number of physicians signed the card, but on examining the bill and the accompanying letter more closely, it was found by many that they had signed the card under a misapprehension of the facts, and they are now ready to express their condemnation of the bill. In view of the above facts it seems better for the health of the public, and more fair and just to all practising physicians to have the proposed optometry bill defeated by an overwhelming vote.

Another aspect of this question, however, deserves consideration. The Optical Society contains about 200 members, many of whom are conscientious and ambitious to see a real elevation in the standard of their calling. The question therefore arises naturally, is it not possible to accomplish this, and can there not be some coöperation between the medical profession and opticians which will be for the credit of both and also for the benefit of the public? Apparently such a solution of the question is possible. In order to accomplish this two things are necessary. These are:

First, the establishment of optical schools or colleges in connection with medical colleges already established. Some of these medical colleges have already departments of pharmacy or dentistry. It would not be difficult to add also a school of optics or "optometry." The course of study should cover at least three years. It could begin with the usual regents' examinations. The students could study the anatomy of the eye, its physiology, its relation to the general system, some physiology, some medicine, and urinary analysis. The course in optics could be complete and thorough, and they could have practical experience in the grinding of lenses, making and fitting frames and all that pertains to that part of the art.

The fact that there are already in existence many small schools in this country which give short courses in optics indicates that there would be a sufficient number of students ready to qualify themselves more thoroughly.

The higher class of opticians, being anxious to raise the standard in that department of education, would naturally be among the founders of such schools and would become valuable co-workers as instructors.

On the completion of such a course the student would receive a diploma with the seal of the college or university, stating his proficiency as a graduate optician.

Second, a law could be passed establishing a board of examiners in optics or in "optometry." This board could be formed in the same manner as the State Board of Medical Examiners, and have the same functions and jurisdictions. The law, if properly worded, could also be within the limits of the state constitution in requiring that after a given date no one would be allowed to prescribe glasses who had not received a license to do so either from the State Board of Medical Examiners or from the board of examiners in optics. An optician thus qualified by three years' study could be trusted to prescribe glasses according to his discretion, though not to use drugs or make operations.

In any such law it would be safe and wise to allow a jeweler or anyone to prescribe glasses for a person when the vision of neither eye is less than a fourth or a third of the normal, as that always has been done and probably would be done in spite of any law that could be framed.

The practical operation of such a plan would be to create three classes of persons who have to do with the prescribing of glasses and the treating of diseases of the eyes, namely:

First, the physician or surgeon or especially the ophthalmic surgeon, who would have studied medicine for the usual four years, and, in addition, qualified himself by clinical study of the

diseases of the eye. He would be familiar with drugs and instruments and be expected to use them with special skill.

Second, the graduate or registered optician, who had studied the subject for three years, who is permitted by law to prescribe glasses, no matter how imperfect the vision of the patient may be, but who does not practise surgery, and uses no drugs.

Third, the simple dealer in glasses, the jeweler, in fact anyone who wishes to give or sell glasses to persons when the vision of neither eye is less than a certain amount, say one-half of normal.

Such a plan would be in harmony with that followed for instruction in pharmacy and dentistry, it would lift the standard of education among opticians at once to a high level, it would not interfere materially with the small optical dealer or jeweler optician, and in every way it would be an advantage to the public. In view of the rapid advances in this department of ophthalmology it is probable that the work of the optician will be recognised by law as a special branch sooner or later, as is the work of the dentist or pharmacist, and when this is done, the law which is then enacted should be vastly better than the one now proposed by the Optical Society.

183 DELAWARE AVENUE.

EXAMINATIONS FOR ARMY SERVICE.

THE examination of applicants for appointment as assistant surgeon in the United States Army will be resumed in Washington immediately after the close of the present session of the Army Medical School; it will embrace the full examination (as heretofore), at the conclusion of which those found qualified will be commissioned. The examining board will probably reassemble about the middle of April next, and those desiring to present themselves before the board should make application at once. Applicants are restricted in age to thirty years, and one year's hospital experience or its equivalent in private practice is required. Full information as to the requisite qualifications for appearance for examination, method of application, nature and scope of examination, and the like, may be obtained upon application to the Surgeon General, U. S. Army, Washington, D. C.

EXAMINATION FOR THE PUBLIC HEALTH AND MARINE HOSPITAL SERVICE.

A BOARD of officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B street, S. E., Washington, D. C., Monday, April 4, 1904, at 10 o'clock a. m. for

the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service. Candidates must be between twenty-two and thirty years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character. The following is the usual order of the examinations: First, physical; second, oral; third, written; fourth, clinical. In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercises consists in examination on the various branches of medicine, surgery and hygiene. The oral examination includes subjects of preliminary education, history, literature, and natural sciences. The clinical examination is conducted at a hospital, and when practicable, candidates are required to perform surgical operations on a cadaver. Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large marine hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco. After five years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Promotion to the grade of surgeon is made according to seniority, and after due examination as vacancies occur in that grade.

Assistant surgeons receive sixteen hundred dollars; passed assistant surgeons, two thousand dollars; and surgeons, twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty and fifty dollars a month, according to grade, is allowed. All grades above that of assistant surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service up to forty per centum after twenty years' service. The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear, before the board of examiners, address.

SURGEON-GENERAL,

Public Health and Marine Hospital Service, Washington, D. C.

February 16, 1904.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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The Ninety-Eighth Annual Meeting.

THE Medical Society of the State of New York met for the ninety-eighth time in annual session at Albany, January 26-28, 1904. It was presided over by Dr. A. T. Bristow of Brooklyn, who proved a dignified and conscientious chief, who will be long remembered for his courtly bearing in the chair and able conduct of the office of president. While these meetings are always pleasant reunions of the medical profession of the state and instructive in a scientific sense, this one was of special interest from both these viewpoints, and from the additional fact that the committee of conference was expected to make its report on the consolidation of the two state medical bodies,—the Society and the Association.

The committee of the Society, through its chairman, Dr. Elsner, made its report, which consisted of an agreement made with the committee of the Association, of the act passed by the legislature granting permission to the two bodies to consolidate, and of the proposed constitution and by-laws of the Medical Society of the State of New York to be in force after the merger. This report, consisting of about thirty duodecimo pages, had been printed and distributed to the members, but it was necessary to read it in full even though it took considerable time, for such an important proceeding could not be dealt with in a perfunctory manner. Immediately upon the conclusion of the reading by Professor Elsner, Dr. Abraham Jacobi, chairman of the "Committee of Ten," offered the following resolution:

Resolved, That the report of the joint committee of conference be accepted, and that the proposed agreement for the consolidation of the Medical Society of the State of New York and

the New York State Medical Association be, and the same is, hereby approved; and the president of the Society is hereby authorised and directed to execute the same, in the name and behalf of the Society, and the secretary is hereby authorised and directed to affix the corporation seal thereto; and, be it further

Resolved, That the committee of the Society heretofore appointed for the purpose of bringing about the consolidation,—namely, Dr. Henry L. Elsner, Dr. A. Jacobi, Dr. A. Vander Veer, Dr. George Ryerson Fowler, and Dr. Frank Van Fleet be, and they are hereby, continued as such committee, with full power and authority to do whatever may be necessary to carry the agreement into effect.

Dr. D. B. St. John Roosa then obtained the floor and in a brief but eloquent speech, full of meaning sentences and in remarkable keeping with the occasion of goodfellowship which prevailed, seconded the motion to adopt the resolution. Dr. Roosa, in the course of his remarks, called attention, "lest we forget," to the acknowledged fact that, except for the action of the Society in 1882, it had not been possible to obtain legislation establishing state examinations for license to practise, similar action having been hastened in other states as a result of the New York law. He also invited attention to the fact that the Congress of American Physicians and Surgeons was organised as a direct result of the refusal by the American Medical Association to receive the delegates of the Medical Society of the State of New York at Saint Paul in 1882,—an unenlightened policy which had prevailed since that time. The existence of the congress had given the medical profession of New York representation in a national medical body of acknowledged worth and influence which, at least, compensated for the loss of representation in the American Medical Association. In concluding, he said the time had now come to sink all differences of opinion on the questions that had divided the profession for twenty-two years,—a condition made possible by the action of the American Medical Association in shelving the code of ethics at New Orleans last May,—and he hoped the report of the committee would receive the unanimous approval of the Society.

Dr. William Warren Potter, of Buffalo, as a member who, in 1882, had voted to abrogate the code of ethics of the American Medical Association, and as an officer in whom the society had reposed an especial trust, desired both for himself and his colleagues on the examining board to second the motion of Dr. Jacobi, and he added that the thanks of the society were due to this committee that had worked so long, so faithfully, and so indefatigably to bring about unification,

Dr. Robert F. Weir, of New York, also as a member that in 1882, had acted with Drs. Roosa, Potter and others on the question then at issue, seconded the motion before the house.

Dr. Willis G. Macdonald, of Albany, said that though he had joined the society at a period much later than the gentlemen who had previously spoken, he yet sympathised with them in their contentions of 1882; but now he felt that the time had arrived for the profession to reunite, and therefore he heartily seconded the motion. Dr. Roswell Park, of Buffalo, said he belonged to the class of members mentioned by Dr Macdonald and desired to join in seconding the pending motion.

The vote was then taken and was declared by the chair unanimously in the affirmative. The cheering was prolonged and the expressions of good-will were vociferous. After order was restored, Dr DeLancey Rochester, of Buffalo, moved the thanks of the society to the committee of conference, which was also carried by unanimous vote. Thus ended the proceedings relating to this long discussed subject, after another important step toward uniting the society and association had been taken.

The scientific program was of special interest and occupied the society for the next two days and a half. The president's address, Professor Hadley's oration and the several symposiums announced, were leading features of a most interesting meeting. The weekly journals all have given full reports of these several topics and of other parts of the program, hence we need not occupy space with unnecessary repetition.

At the banquet given Wednesday evening at The Ten Eyck, more than three hundred members and guests spent four hours of unalloyed pleasure. The menu was excellent, the dinner well served, the speeches entertaining and the music inspiriting. President Thornton of the Association and many of the Fellows of that body lent their presence to the joyous occasion which will long be remembered. Dr. Herman Bendell officiated as toastmaster in the most felicitous manner.

The election of officers for the ensuing year resulted as follows: president, Hamilton D. Wey, Elmira; vice-president Joseph D. Bryant, New York; secretary, Frederic C. Curtis, Albany; treasurer, O. D. Ball, Albany. The heads of standing committees were chosen as follows: arrangements, Herman Bendell, Albany; by-laws, H. B. Delatour, Brooklyn; hygiene, John L. Heffron, Syracuse; ethics, Edward S. Willard, Watertown; prize

essays, A. Jacobi, New York; publication, F. C. Curtis, Albany; legislation, Frank Van Fleet, New York.

Dr. Hamilton D. Wey, the newly-elected president is one of the leading physicians in the Southern Tier, is about 50 years



HAMILTON D. WEY, M. D.

of age and has been a permanent member of the society since 1894. He has been for several years chairman of the committee on by-laws and is thoroughly versed in the traditions, methods and interests of the society, all of which will be effectively safeguarded by his administrative policy. His father, Dr. William

C. Wey, was president of the society in 1871, prominent in its councils for thirty years, and was president of the state board of medical examiners for an extended period. Never before in the history of the society have father and son served in its highest office. It should be,—no doubt is,—a proud incident in the career of the son, doubly so because of the distinguished services rendered by his father to the society. Hamilton D. Wey is a strong name in Elmira and the southern part of the state. We predict it will be equally so in every section of the commonwealth before a year has past. An incident in the proceedings of last year deserves to be remembered. When the committee of nomination reported it was discovered that Hamilton D. Wey had six votes and A. T. Bristow two votes, these two names being presented to be balloted for under the rules. Dr. Wey immediately rose and said:

I should be ungrateful if I failed to express appreciation of the honor conveyed by this action of the committee, but I think that logically and geographically the presidency this year should go to Kings county. I, therefore, ask unanimous consent for permission to withdraw my name.

The permission was granted with an expression of the appreciation of his reason and motives, and Dr. Bristow was unanimously elected. Only a strong man could do a thing like that.

The JOURNAL offers its congratulations and best wishes to the distinguished president-elect.

Ophthalmology versus Optometry.

THE annual struggle with its exchange of compliments is renewed. The opticians are trying to obtain a professional status from the legislature without having any recognised diploma or any definite course of study. In order to allay suspicion the medical fraternity is to be exempt from provisions of the bill creating this professional standing, thus acknowledging the right of medical men to the field the opticians are trying to invade.

A few years ago a horoscope, published in a jewelers journal, predicted that the care of the eyes and the adjustment of glasses would ultimately be entirely in the hands of the medical men. In the meantime that city is insignificant which has not at least one optical college. The founding of an institution of this sort is simplicity itself. The promoters decide who shall teach, the amount of fees, where to advertise, and the thing is done. The opticians have annual meetings where assemble those who style

themselves professors of optics (from these colleges), the alumni (sic) of the institutions, together with others holding beautiful diplomas certifying they have paid from \$7.50 to \$10.00 for a correspondence course in optics, whereby they have learned such words as astigmatism, homonymous diplopia and one or two others equally impressive.

Ninety per cent. of the oculist's work is refraction, while very little space in the average ophthalmological journal is devoted to it. Where then can a medical man learn refraction? It is conceded that German, English and French medical institutions do not bother with the same nicety of adjustment of glasses that is found in this country, while here the places are lamentably few where one can learn refraction with any degree of thoroughness. How then is one to take up the work? During his college course he is shown a few sore eyes and is allowed to witness some eye operations performed by the attending ophthalmologist. He usually cuts these lectures to attend quizzes on pneumonia or therapeutics, for the importance of the eye in general medicine is rarely sufficiently emphasised. Later, if he becomes interested in eye work, he studies some books on refraction and tries to prove his work by the test case; but it takes him years in this way to learn what he could take up with the rest of his medical studies. The only other alternative is to attend some post-graduate course where he would get plenty of theory but, generally speaking, very little opportunity for practical experience in the work.

Articles have occasionally appeared objecting to opticians practising medicine by fitting glasses. If this is a department belonging to medicine, why isn't it included in the curriculum of medical colleges? If this is the case the colleges then should offer better facilities for the study of this branch of medical science and every graduate would be able to eliminate eye strain as a cause of reflex disturbances, to say nothing of the tremendous advantage a knowledge of the fundus of the eye would be as an aid in diagnosing many general pathological conditions. More attention to the eye in the medical course would speedily settle for all time the controversy now going on, and keep the adjustment of glasses where it belongs,—under the care of licensed physicians.

Dinner to Dr. Roosa.

DR. D. B. St. John Roosa, of New York, was the guest of honor at a dinner tendered to him by distinguished citizens, physicians, and laymen residing in various parts of the country, on Tuesday evening, March 1, 1904. Special import-

ance is given to the function because it also commemorated the twenty-one years since the inauguration of post-graduate medical instruction in this country, Dr. Roosa being the founder of the first school of that kind on this side of the Atlantic. The dinner, which was served at Delmonico's, was presided over by Dr. William Osler, of Baltimore, and was attended by a large number of representative physicians and business men at home and from a distance, all the leading cities being represented. It was an event worthy the occasion in every way and served to accentuate the respect and affection of the people all over the country for the distinguished guest of honor. The following names were appended to the cards of invitation: Drs. William T. Bull, Francis Delafield, Bache Emmet, Virgil P. Gibney, Edward G. Janeway, William M. Polk, A. A. Smith, A. H. Smith, and Robert F. Weir, New York; Albert Vander Veer, Albany; A. W. Calhoun, Atlanta; William H. Welch, William S. Halsted, Baltimore; Clarence J. Blake, Maurice H. Richardson, Boston; William W. Keen, John H. Musser, J. C. Wilson, Philadelphia; George Ben Johnston, Richmond; William J. Mayo, Rochester, Minn.; and James W. Alexander, Edward T. Bartlett, Cornelius N. Bliss, William D. Howells, Morris K. Jessup, Edward King, John E. Parsons, J. Edward Simmons, and J. H. Van Amringe, of New York.

The guest of honor, noted as a gifted speaker, made one of the best speeches of his life, and other addresses in timely keeping with the event, served to make it one of the most enjoyable of occasions as well as one of the most notable dinners that has ever been tendered a physician in this country.

Substitution and Sudden Death.

THAT the use of depressant drugs bears direct relationship to sudden death has been demonstrated over and again by statistics. The *Journal of the American Medical Association*, January 16, 1904, in its editorial columns deals intelligently with this subject. In the city of New York the deaths from heart disease steadily increased during the years 1900, 1901, and 1902, in which the ratio of deaths of this kind in each thousand was 1.18, 1.31, and 1.34, respectively. The *Journal* comments on this subject as follows:

For the year 1903 there was a decrease in the number of deaths from this cause, so that the ratio was only 1.28 per thousand. There has been some discussion among sanitarians and public-health officials as to the reason for this decrease. A portion of the decrease has been ascribed definitely—and with con-

siderable plausibility—to a certain cause. At the beginning of last year the board of health, suspecting that many prescriptions for phenacetin were being filled by druggists with acetanilid, or with a mixture of phenacetin and acetanilid, sent inspectors to obtain definite information on this matter. Altogether 373 samples of phenacetin were bought from the same number of drug stores in various parts of the city, phenacetin being specially asked for and in some instances even obtained, on a physician's prescription. Of the 373 samples, 58 were pure phenacetin; 315 were adulterated with cheaper drugs, mainly acetanilid, and in 267 cases containing more acetanilid than phenacetin; 32 samples were pure acetanilid. The commissioner made these facts public, and threatened to expose and prosecute all druggists who would hereafter be found committing this misdemeanor.

It is very interesting at least to find that a single year after the investigation and supposed consequent reform on the part of the dispensing pharmacists, there should be a slight reduction in the actual sudden death rate from heart disease, and that at a time when for many years there has been a constant increase in the death rate from this cause.

This question of the evil of depressant drugs is all the more interesting because of the freedom with which so-called headache powders, mainly composed of acetanilid and other heart depressants, are now so commonly bought and sold. Many women, and even men, think nothing of stepping into a drug store and asking for something for a headache. The headache powders that are dispensed to them so freely always contain acetanilid, and great harm is being done in this way. It is probable that a similar investigation in other cities of the country might also furnish instructive facts.

It will be observed from a careful examination of the foregoing that the ever present question of drug substitution receives a severe indictment, when many sudden deaths can be directly traced to its criminal employment. The law should be invoked and that speedily to regulate the dispensing of the class of drugs referred to, and to punish those who substitute one drug for another in physicians' prescriptions.

Shall the Society Publish a Journal?

THE Medical Society of the State of New York should ask itself this question in all seriousness. It should be answered upon plain business principles, devoid of prejudice, without bias, and uninfluenced by considerations other than those which should govern similar individual enterprises.

In a review of the last volume of the transactions of the society published in the December (1903) issue, the JOURNAL said:

The advantages of an annual volume of society transactions are so superior to the journal method, it is surprising that it is not adhered to, at least by the older societies. Journals become lost, mislaid, or otherwise disposed of, and thus the record is broken; whereas, a book properly bound is always accessible, and is an ornament to the library. It is the cheaper method, too; hence, it does not necessitate large fees. The journal method will bankrupt any society in the end, unless it has a large constituency paying in turn large dues to support it. There are too many journals in existence already, and state societies should not enter the field of competition, because it places them too distinctly in the commercial class, hence serves to lower their *esprit de corps*.

While the foregoing may not apply as forcefully in the west, where there are fewer journals, and among state societies that do not possess bound volumes showing nearly a hundred years of being, here in New York, with three splendid weeklies and a score or more of stalwart monthlies, it certainly has considerable application. Moreover, a journal in addition to the regular work of the society must print editorials, abstracts, foreign material, book reviews, and a mass of matter not germane to the real object of the society journal.

The salaries of an editor and a business manager also make a large item of expense which must be met monthly, all of which eats up the income with speed, to meet which larger dues are required than under the old plan. A bound volume is easy to find and consult; it is a book that will be cared for jealously, and be prized for the record it contains. For these and many other reasons that might be offered, we feel that it will be a mistake for the society to undertake the change from an annual volume to a monthly journal in the publication of its proceedings.

APOLLINARIS WATER has long been considered one of the most agreeable and popular table waters in use. Somebody has questioned its right to be classed as a natural mineral water, but this promptly was decided in the affirmative. The London *Lancet*, however, determined to investigate the subject for itself and recently sent a special commissioner to visit the Apollinaris spring in Germany. He reports the results of his investigations in the *Lancet* of January 30, 1904. It is based on numerous analyses made at the spring and of various samples of the water purchased in the open market. The article, which is long, interesting and conclusive, ends as follows:

It is difficult to suggest, in the face of the facts just recorded and of the experience which has decided upon the adoption of the methods of bottling Apollinaris which we have described, how those methods could be altered with any possible advantage to the public or how any modification of those methods would enable the public to receive the water in a condition more natural than it is. As a matter of fact Apollinaris water is bottled in such a way that the natural equilibrium of the water and its complement of gas at a depth 50 feet in the spring are preserved in the bottle for public use. Both water and gas are absolutely the natural products of the spring and the composition of the bottled water is, according to our analysis, always the same and without any appreciable variation in the mineral constituents. Some portion of a useless constituent, in the form of oxide of iron (the total amount in the water being quite minute) separates from the water prior to bottling but a useful constituent, in the shape of a small quantity of salt, is added to augment the amount of salt already naturally present in the spring in order to prevent the possible decomposition to which the sulphate of sodium of the water is occasionally liable. The taste of the water in bottle is identical with that of the water taken directly from the spring. Apollinaris water has a peculiar soft flavor which is due not to common salt at all, but in part to the alkaline carbonates which neutralise the acids in the mouth, and in part to the natural state of combination of the mineral ingredients. As Professor Oscar Liebreich has said, "even the best manufactured artificial mineral waters differ from the natural ones in taste and value." There is nothing disclosed in our analysis of the bottled water which is not found in the water at the spring. In view of these facts which we have taken some trouble to ascertain for ourselves, it seems to us that the recent decision of the Lord Chief Justice that Apollinaris water is entitled to the description of a natural mineral water is in accordance with both law and common sense.

We may add that our analyses and observations are in substantial agreement with those given at various times by the late Professor Virchow, Professor Bischof, Professor Liebreich, Professor Mohr, Professor Hofmann, Professor Kekulé, Professor William Odling, and the late Sir Edward Frankland.

Physicians will be pleased to observe the favorable comment of such high authority on this favorite water.

AN EPIDEMIC of typhoid fever, at Watertown, N. Y., threatens to assume proportions of considerable magnitude. Several hundred cases have already been reported, though the percentage of deaths has been comparatively small. An expert from the state department of health has been sent to investigate the source of the epidemic which is supposed to lurk in the unfiltered water

of the Black river. The lessons to be derived from the penalties paid by the neglect in other cities to maintain an uncontaminated water supply appear to be slow of inculcation.

A BILL to establish a laboratory for the study of the criminal, pauper, and defective classes is proposed to be introduced in the legislature at Albany. It is based on a similar bill already pending in congress. The importance of a study of these classes is recognised by scientific men all over the country. Such a bureau would have for its purpose the gathering of data of a sociological, pathological or abnormal nature and may well be undertaken by the state on economic grounds. As it is cheaper to prevent disease than to cure it, so it is cheaper to prevent crime than to punish it.

We are not disposed to enter into details relating to this subject at this time, our object being rather to invite attention to the propriety of establishing a systematic method of study relating to the classes mentioned, as an economic problem for the state to consider.

CLEAN money is an important desideratum as every physician will attest. Soiled currency is a medium for the transmission of disease; this, too, every physician knows. A remedy is offered in congress through a bill to create post check currency. In other words, it is proposed to create a system of bank notes, payable to the order of the individual named on the face of the bill. This can be sent through the mails, properly indorsed, similarly to personal checks or drafts. It is cancelled after one payment made through its medium, hence the danger of transmitting disease is reduced to a minimum. Fractional currency could thus be created which would meet a great demand in the payment of small sums to persons at a distance. This proposition being in the interest of the prevention of disease should receive the approval of every physician.

THE Bureau of Standards in the Department of Commerce and Labor at Washington, is created for the purpose of verifying standards relating to measuring instruments of various kinds. Among other things the testing of clinical thermometers will engage its attention. This important service will be appreciated by physicians and hereafter these thermometers will not be considered accurate unless the certificate of the bureau of standards is attached. This certificate will embrace the following data: (a) description of article or instrument; (b) Bureau of Stand-

ards test number, and certification number when allowed; (c) name of party for whom test is made; (d) temperatures at which comparisons are made; (e) other conditions of the test; (f) corrections at each test point; (g) date of certification; (h) seal of the Bureau and the signature of the director; (i) special remarks when necessary.

DR. FERD. C. VALENTINE, of New York, has had occasion to reprimand the A. S. Valentine Chemical Company through his attorney, for the use of the name *Valentine* in connection with a "Benzol-Capsule Valentine," which the company manufactures and markets under that commercial name. Dr. Valentine, in a published circular, says that the counselor of the so-called Valentine company had an interview with Mr. Quinby, Dr. Valentine's legal adviser, January 20, 1904, in the course of which the company's counsel promised to advise his clients to cease the use of the word Valentine in any manner whatever. In the circular referred to, Dr. Valentine asks to be notified if anyone shall discover any violation of this promise. His address is 31 West 61st street, New York.

PERSONAL.

DR. J. N. McCORMACK, of Bowling Green, Ky., secretary of the Kentucky state board of health and chairman of the committee of organisation of the American Medical Association, attended the ninety-eight annual meeting of the Medical Society of the State of New York at Albany, January 26-28, 1904. Dr. McCormack met many old friends and made hosts of new ones on that occasion, all of whom were glad to shake his cordial hand and listen to his charming conversation. His speech at the annual dinner was one of his best efforts and received the generous plaudits of the banqueters.

DR. NELSON W. WILSON, of Buffalo, has been appointed assistant to Dr. Park in the department of genitourinary surgery at Buffalo General Hospital.

DR. HENRY N. MILLER, of Lancaster, N. Y., has removed to Buffalo and established his office and residence at No. 381 Hudson street. He is a brother of Dr. J. G. Miller, the well-known physician at Lancaster.

DR. F. H. MILLENER, of Buffalo, addressed the Buffalo Society of Natural Sciences on Friday evening, February 12, 1904, his subject being The induction coil and its resulting phenomena,—the *x*-ray and wireless telegraphy. The lecture was illustrated by apparatus a portion of which Dr. Millener, himself, constructed. The address was well received by a large audience.

DR. DEWITT G. WILCOX, of Buffalo, was elected secretary of the Homeopathic Medical Society of the State of New York at its annual meeting held at Albany, February 11, 1904.

DR. JOHN H. PRYOR, of Buffalo, has passed a successful examination before the State Civil Service Commission, thereby qualifying for the position of superintendent of the state hospital for consumptives at Ray Brook. Dr. Pryor is practically the founder of the institute, having first proposed its establishment in a paper read some years ago before the Medical Society of the State of New York. He afterward prompted the introduction of a bill into the legislature establishing the institution and led in the contest, through its several stages, until it was finally enacted into law.

DR. WILLIAM R. PRYOR, of New York, read a paper before the section of obstetrics and gynecology, Buffalo Academy of Medicine, Tuesday evening, February 23, 1904, entitled, The technique of a radical abdominal operation for carcinoma of the uterus. Dr. M. D. Mann entertained Dr. Pryor and prominent local physicians at dinner at his residence, 31 Allen street, just previous to the meeting.

OBITUARY.

JOHN KNOWSLEY THORNTON, M. B., C. M. Edin., died at his residence, Hildersham Hall, Cambridge, Eng., January 3, 1904, aged 58 years. Mr. Thornton was at one time one of the leading abdominal surgeons in London and performed distinguished service for several years at the Samaritan Fever Hospital. He was also authority on abdominal surgery in which special line of work he developed rare skill, great acumen and masterful results. He began as an assistant to Sir Spencer Wells and finally achieved the highest fame as a bold, conscientious and careful operator. His commanding presence at the operating table dominated assistants, nurses, and visitors, and one did not need to

be long in his presence to recognise his manly and professional worth.

He fell ill in 1896, suffering repeated attacks of influenza, complicated by gout. In 1898 he retired from practice and, until his death, lived at Hildersham Hall, near Cambridge. He sought, through work in his garden and farmyard, to restore his lost vigor, a struggle which vainly continued through much suffering until peripheral neuritis finally exhausted his strength. He was married twice: first, to Miss Patterson, by whom he had a son and two daughters, the former holding an appointment in South Africa: his second wife was the Hon. Mary Windsor Clive, by whom he had a daughter; they both survive him.

Mr. Thornton was an Honorary Fellow of the American Association of Obstetricians and Gynecologists.

DR. ROBERT G. WILDING, of Malone, N. Y., a permanent member of the Medical Society of the State of New York, died suddenly, February 24, 1904, of an affection of the heart, aged 67 years. Dr. Wilding was a man of prominence both in professional life and as a citizen, and will be greatly missed in both spheres of great usefulness.

DR. MARTIN E. BRACKETT, of Clarendon, N. Y., died at his home in that village January 2, 1904. Dr. Brackett graduated at the University of Buffalo in 1891.

DR. GEORGE G. JONES died at his home at Geneseo, N. Y., January 25, 1904, aged 48 years. He graduated at the University of Buffalo in 1886.

SOCIETY MEETINGS.

THE American Medico-Psychological Association will hold its next annual meeting at Saint Louis, May 30, to June 3, 1904, under the presidency of Dr. A. E. Macdonald, of New York. Among the papers to be presented are the following: The alcoholic psychoses, by Henry P. Frost, Buffalo; The German psychiatric clinics, by Edward N. Brush, Baltimore; A case of sleep talking, by D. R. Burrell, Canandaigua, N. Y. The headquarters of the association will be at the Planters Hotel. For further particulars address the secretary, C. B. Burr, Flint, Mich.

THE first French Congress of Climotherapy and Hygiene of Towns will be held at Nice, April 4-9, 1904, under the presidency of Professor Chantemesse, as heretofore announced. Reductions in railway fare in France at the rate of 50 per cent. will be allowed. A number of excursions and receptions have been provided. For further information, apply to Dr. Hérard de Bessé, general secretary, Beaulieu Sur. Mer.

THE Medical Society of the Missouri Valley will hold its next meeting at Lincoln, Neb., March 24 and 25, 1904, under the presidency of Dr. A. D. Wilkinson, of Omaha. Dr. Charles Wood Fassett, Saint Joseph, is the secretary.

THE tenth quadrennial Congress of Polish Physicians and Scientists will be held at Lemberg, Austria, July 20-24, 1904. Prof. E. Machok is the chairman of the committee of arrangements, and Prof. W. Sieradzki, secretary. Dr. Francis E. Fronczak, of Buffalo, is the representative of the committee for the United States.

THE Vanderburgh County (Ind.) Medical Society held its regular meeting January 19, 1904, at the offices of Drs. Walker and Welborn, it being the tenth anniversary of the opening of the Evansville Sanitarium. The meeting took the form of a reception, at which luncheon was served and was much enjoyed.

This society three years ago took into its membership all the homeopaths and eclectics, probably the first in the country to take such sweeping an action. The results, however, have fully justified its course. It is remarkable that a city of 75,000 inhabitants exists without a doctor's sign displaying the words "homeopath" or "eclectic." Practically every physician in the county is a member of the regular organisation.

THE National Association of United States Pension Examining Surgeons will hold its third annual meeting at Atlantic City, N. J., June 6 and 7, 1904, under the presidency of Dr. William A. Howe, of Phelps, N. Y. The program committee, consisting of William A. Howe, president; Charles H. Glidden, treasurer, and Wheelock Rider, secretary, makes the following suggestions for titles of papers and subjects for discussion:

Pain—Its physical diagnosis.

The malingerer—A symposium. (The program committee will arrange this symposium if members who are doing special work will volunteer, each in his own line.)

Disease as a disabling factor in earning capacity.

Novel methods of physical diagnosis.

Old age as a modifying factor in disease and disability.

Nervous diseases as disabilities.

Tricks of the pension examiner's trade—Wednesday experiences.

These titles are intended to be merely illustrative of the general character of the papers which the committee thinks most likely to be interesting and useful. Intending readers may select other titles or may modify these in any way which seems best, or may use them as they stand.

Papers, however, only upon subjects of special interest to pension examining surgeons are desired. A provisional program will be issued at a later date.

THE Buffalo Academy of Medicine held meetings during the months of January and February as follows:

Section on Obstetrics.—Tuesday evening, January 26. Program: Rupture of the uterus, Ludwig Schroeter; discussion opened by Matthew D. Mann.

Section on Surgery.—Tuesday evening, February 2. Program: Diagnosis and treatment of diseases of urinary bladder, James Henry Dowd.

Section on Medicine.—Tuesday evening, February 9. Program: Tetany and its relation to gastric diseases, Allen A. Jones; discussion opened by James W. Putnam.

Section on Pathology.—Tuesday evening, February 16. Program: Transplantation of suprarenal glands, F. C. Busch; Changes in the blood at high altitudes, C. Van Bergen. Specimens were exhibited by Drs. A. E. Woehnert, N. G. Russell, Irving P. Lyon, and W. H. Mosher.

Section on Obstetrics.—Tuesday evening, February 23. Program: The technic of a radical abdominal operation for carcinoma of the uterus, Wm. R. Pryor, Professor of Gynecology, New York City Post Graduate School and Polyclinic.

COLLEGE AND HOSPITAL NOTES.

THE Children's Hospital, of Buffalo, has issued its eleventh annual report, which covers the period for the year ending October 1, 1903. This hospital is one of the most deserving charities and is doing a splendid work. The demands upon its

space and purse are increasing with the growth of the city, and philanthropic people are invited to contribute to the support of the hospital.

THE New York State Hospital for the care of Crippled and Deformed Children, located at Tarrytown, recently has sent out its third annual report, which is for the year ending September 30, 1903. The Right Rev. Henry C. Potter, D. D., Bishop of New York, is president of the board of managers and Dr. Newton M. Shaffer, of New York, is the surgeon-in-chief of the hospital. Buffalo University Medical College is represented on the consulting staff by Drs. Roswell Park and Charles G. Stockton. The board of managers express the wish that the names and addresses of poor children residing in Buffalo and vicinity, who are crippled or deformed, be sent to the surgeon-in-chief of the hospital at Tarrytown.

THE Buffalo General Hospital, according to the report of Stephen M. Clement, Esq., president, lately published, has raised during the past year \$185,242.50 for the purpose of liquidating certain indebtedness which has accumulated during several years past. This magnificent sum has been raised by subscription and reflects great credit upon the astute financial management of Mr. Clement. Two subscriptions are notable, that of Mr. F. H. Goodyear for \$50,000 and that of Mr. William Hamlin for \$49,000. The hospital still needs about \$15,000 to make good the deficit. It seems probable that this comparatively small sum will be contributed by some of our philanthropic citizens.

AT Hagerstown, Md., a hospital is to be established for the county of Washington. A public meeting was held February 3, 1904, at which it was voted to build a hospital to cost \$50,000, with a maintenance fund for annual current expenses estimated at \$10,000. Taxes will be levied to meet these items of expenditure. If this kind of enterprise prevailed in the state of New York, there would be less solicitation of private subscriptions to meet the cost of maintaining public charities, among which every general hospital should be classed.

At the German Deaconess's Hospital, 218 Kingsley street, Buffalo, a vacancy has occurred on the house staff. Young physicians who desire such an appointment may address in person or in writing the superintendent of the hospital as above indicated.

UNIVERSITY DAY, February 22, 1904, was celebrated by the students in the several departments of the University of Buffalo in a fitting manner. Under the escort of a brass band they marched in a body from the university building to Concert Hall, where they listened to an address by George E. Vincent, P. H. D., of the University of Chicago, on the subject, Education and efficiency. The proceedings were opened with prayer by the Rev. Charles Edward Locke, after which Dr. M. D. Mann, dean of the medical department, introduced the speaker. The proceedings were interspersed by musical selections rendered by the University Mandolin Club. Afterward, Dr. Vincent was entertained at luncheon at the Saturn Club by the faculty of the University.

THE Riverside Hospital has issued its annual announcement for 1904. It is located at 113 Lafayette avenue, Buffalo, a residential section of the city and is owned and managed by Dr. Lillian Craig Randall, who established it about twelve years ago. The hospital has accommodations for forty patients and is equipped with the usual operating, electrical, sterilising, and anæsthetising rooms. It has an out-patient department, also an accident hospital, the latter being located at 118 East Swan street. It also has a first-relief station located at Black Rock. There is a maternity department attached to the out-patient service under the charge of Dr. James E. King. Applications for admission to the Riverside Hospital or any of its branches, should be made to Dr. Randall.

BOOK REVIEWS.

A TEXTBOOK OF PRACTICAL GYNÆCOLOGY FOR PRACTITIONERS AND STUDENTS. By D. TOD GILLIAM, M. D., Professor of Gynecology in Starling Medical College, Columbus; Gynecologist to St. Anthony and St. Francis Hospitals, Columbus, O. Octavo, pages 650. Illustrated with 350 engravings, a colored frontispiece and full page half-tone plates. Philadelphia: F. A. Davis Company. 1903. (Cloth, \$4.00 net; half-Russia, \$5.00 net, delivered.)

The year 1903 will take rank as the banner year for the publication of new works on gynecology; at least not in many years, if ever, have so many treatises on this branch of medicine issued from the press in a single year as during the one just ended. It is a great satisfaction to observe that they have all been of excellent character, and most will take permanent places in the literature of medicine. The author of the book before us has long been known as one of the foremost teachers and

writers in this country, and it seems appropriate that he should put forth a complete treatise on the branch that he has made the subject of special study and successful practice for many years. His work, therefore, may be regarded as the result of mature experience, and it records demonstrated fact, rather than theory,—clinical results, not debatable propositions.

Gilliam divides his book into fifty chapters of nearly uniform length, his object being to make it correspond to the usual number of teaching hours devoted to gynecology in the average collegiate term. He begins with a brief chapter on the causes of disease in women, and then takes up gynecologic examination, which forms the subject material of two chapters. His directions are excellent, though in one or two respects he is, perhaps, unnecessarily minute,—a good fault, however, if it be a fault. His technic is beyond criticism. The chapters on diseases of the vulva and vagina are both interesting and instructive. He treats injuries to the pelvic floor and their repair with intelligence and skill, so also genital fistulæ and displacements of the uterus.

Gilliam describes in detail (p. 209) an operation which he, himself, devised for repositing the retrodisplaced uterus and which he terms round ligament ventrosuspension. He first described the operation at the meeting of the American Association of Obstetricians and Gynecologists at Louisville in 1900, since which time it has become known as the "Gilliam Operation." Dr. Edward J. Ill, of Newark, N. J., read a paper at the last meeting of the association aforementioned, in which he so styled it both in the text and title of his contribution. The various steps of the operation are clearly and artistically illustrated in this treatise.

The author next treats upon inflammation and trophic disorders of the cervix uteri in a well-written chapter, and then describes laceration of the cervix with the operations for its cure. Cancer of the uterus—cervix and corpus—take up several chapters, in which the most modern doctrines and procedures are taught. Fibroid tumors are considered in two chapters that are not excelled for their value on this topic, the illustrations of the operative technic in its several steps being superb. Infections of the fallopian tubes occupy attention in the next four chapters, including operation and electrical treatment of salpingitis and tubercular disease of the tubes.

Two chapters are devoted to ectopic gestation, in which the usual surgical measures are advocated. The author has clearly illustrated the several varieties of ruptures of the tube, an important item, and described a tubal abortion for which he, himself, operated. Inflammatory diseases of the ovaries, together with cystic and solid tumors thereof are dealt with in the next few chapters, which clearly describe the conditions, and in which the topic is excellently illustrated. The remaining chapters are de-

voted to the consideration of diseases of the urinary tract and rectum. In no treatise on diseases of women with which we are familiar have these latter topics been dealt with as elaborately and satisfactorily.

The plan of this treatise is somewhat novel and it will appeal to students and undergraduates because it is a plain, connected clinical narrative rather than a discussion of ultra scientific theories. The author's style is commendable for its simplicity and clearness. His sentences are examples of terse English; they are neither obscure nor involved, but aim at something of importance,—and hit it. The mechanical execution of the book is above criticism, and its illustrations are especially to be commended. It is a work that will take a permanent place in the libraries of those interested in the teaching or practice of gynecology.

NERVOUS AND MENTAL DISEASES. By ARCHIBALD CHURCH, M. D., Professor of Nervous and Mental Diseases and Head of Neurological Department, Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., President New York State Commissioner in Lunacy; Chief of Clinic, Department of Nervous Diseases, College of Physicians and Surgeons, New York. Fourth edition, thoroughly revised and enlarged. Octavo, 922 pages, with 338 illustrations. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep and half morocco, \$6.00 net.)

The combining of the two great sciences of neurology and psychiatry in one volume has been most satisfactory to students and practitioners. Dr. Church, the author of the section on nervous diseases, has succeeded in presenting the clinical pictures of the typical nervous diseases in a clear and graphic manner. His directions for examining patients and his method of history taking are careful and minute. His summing up of the values of different signs and symptoms is modern and up-to-date. We would call particular attention to his summary on reflexes on page 37. The chapter on injuries and diseases of spinal nerves is of special value. The researches of Tizzoni, Kennedy, Bethe Ballance and Stewart in nerve regeneration are reviewed. The healing of divided nerves is a subject of great importance and one in which modern investigation has revealed the possibility of union of divided nerves after many years.

The treatment of nervous diseases is more elaborately described and more hopeful in tone than that adopted by many authors. Too often we read that "electricity may be used and hydrotherapeutic measures be tried; massage is useful." There is no such vague and meaningless phraseology to be found here. If electricity is advised, the strength and choice of current and method of application is minutely detailed, and the same is true in the directions for massage and hydrotherapy. In the disease in which the prognosis is hopeless, the physician is reminded that it is the patient and not the disease we are

called upon to treat. If the disease can not be cured or its progress stayed, surely much needs to be done to make the patient more comfortable and the malady more easily borne. It is time that the hopeless helplessness of the physician in the face of disease which he cannot cure, be abandoned and that active measures for the relief of the unfortunate be substituted. Cure is not the only goal,—teaching the patient to bear his burden is fully as important.

The section of psychiatry by Dr. Peterson is a masterly condensation of the great subject of insanity. The various types of mental disease are graphically described,—the progress of the several insanities is traced in a clear and vivid manner.

The methods of examination of patients and the general treatment of insanity are excellent guides to the practitioner. The only regret we feel it a duty to record is that in this volume there is no chapter devoted to alcoholism or to drug habit. We believe these subjects should be treated in books on nervous and mental diseases, and we express the hope that a future edition will include such a chapter. We know of no book on nervous and mental diseases which is more useful to the general practitioner than the Church-Peterson. J. W. P.

A TEXTBOOK OF OBSTETRICS. By BARTON COOKE HIRST, M. D., Professor of Obstetrics in the University of Pennsylvania. Octavo, 900 pages, with 746 illustrations, 39 of them in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

At the present time there are several textbooks recognised as authority on obstetrics, one of which is Hirst's,—a work that stands in the van. The author makes an excellent point in his preface, wherein he declares that nearly all the diseases of women result from childbirth either simple or complicated, hence their preventive treatment rests with the obstetrician. It naturally follows, and this is also well formulated by the author, that the physician in general practice must be equally well informed in obstetrics and gynecology, at least to the extent that he may recognise the necessity for the application of this or that measure, even though he may not possess sufficient skill to make appropriate use of all; but, that the specialist in obstetrics must be an expert in the surgical treatment of diseases of women, admits of no doubt.

From the foregoing and as a corollary thereto it may be stated that the student must approach his studies through the avenue of the best authority, in the companionship of the best books. This one may be chosen with confidence and studied with the assurance that it is of the best. The changes in this edition are such as to bring it forward to the immediate present in its teachings; great attention has been paid to diseases of the genital organs following childbirth; many new illustrations have

been inserted, even the kliseometer, a new instrument for determining the inclination of the pelvis, has been described and illustrated. The entire treatise commends itself to obstetrician, general practitioner, and student.

TRANSACTIONS OF THE NATIONAL ASSOCIATION OF UNITED STATES PENSION EXAMINING SURGEONS. Second annual meeting held at Washington, D. C., May 13 and 14, 1903, including an account of first meeting held at Saratoga Springs, June 9, 1902. Edited by Wheelock Rider, M. D., Secretary. Published by the Association.

This association, which now for the first time publishes its transactions, sprang into being at Saratoga in June, 1902. It was suggested by Dr. William A. Howe of Phelps, N. Y., in a circular letter sent out to pension examining surgeons some time before, stating that it seemed feasible to organise such a body. The suggestion met with immediate favor and the result has been most satisfactory. Two meetings have been held and the work done at both is recorded in this book.

The address of welcome by the Commissioner of Pensions, Hon. E. F. Ware, delivered at the Washington meeting, May 14, 1903, is in admirable form,—witty, brief and dignified. The medical Referee, Dr. Sam Houston, also delivered an address, in the course of which he advocated the utilising of the pathologic history of instructive cases for the benefit of medical science.

Dr. Raub's paper, delivered at Saratoga, is also published in this book, and is one full of suggestive thought to pension examiners. It has been widely circulated and is eagerly sought by those who have not read it. Dr. John C. Hemmeter of Baltimore read a paper on Chronic malaria and its complications and sequelæ that is the most scientific paper in the book. It should be studied carefully by all pension examiners.

The book is well arranged and its general appearance shows the careful supervision of the secretary-editor.

MODERN SURGERY: GENERAL AND OPERATIVE. By JOHN CHALMERS DACOSTA, M. D., Professor of the Principles of Surgery and of Clinical Surgery in the Jefferson Medical College, Philadelphia. Octavo, 1099 pages, with over 700 illustrations, some in colors. Fourth edition, greatly enlarged and entirely reset. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

From 1894, when the first edition of this book appeared, to 1903, the date of the fourth edition, embraces a period in which a long stride was taken by surgery. The improvements made in this work in the nine years referred to,—at first a modest manual, now a pretentious treatise,—testify abundantly to the truthfulness of this statement. If, however, we limit the time of observation to the period embraced between the editions of 1900 and 1903, we still find ample reason, through the marked

progress in surgery during that time, for an entire rewriting of the fourth edition.

Besides the careful revision of the book much new matter has been added, the illustrations have been increased in number and improved in quality, while a larger sized page has been adopted, making it now one of the comprehensive textbooks on surgery, yet not cumbersome nor loaded with useless material. It deals with the present approved methods of surgical practice, and not with obsolete or antiquated details. It is emphatically a book of today and will afford satisfaction to the reader, whether teacher, practitioner, or student.

A TEXTBOOK ON THE PRACTICE OF MEDICINE. Designed for the Use of Students. By JAMES MAGOFFIN FRENCH, M. D., Lecturer on the Theory and Practice of Medicine, Medical College of Ohio; Attending Physician, St. Mary's Hospital, Cincinnati. Octavo, pp. 799. Illustrated by ten full-page plates and fifty wood engravings. New York: William Wood & Company. 1903. (Cloth, \$4.00.)

If an additional treatise on the practice of medicine were needed we know of no one better qualified to supply it than Professor French. With the wealth of literature on this topic already in the hands of the profession it seems almost needless to offer another textbook at this time; nevertheless there is much reason for this one; it is compact, being of less dimensions than most of those issued recently,—an important factor for students of medicine; its make-up and general form are excellent; it is terse even to conciseness without being elementary; it deals with only the practical, leaving the theoretical behind; it contains the most modern thought and records the most recent discoveries; it omits case reports and instead deals with more useful material, thus economising space and preserving the patience of the reader; finally it is illustrated with a few well selected and excellent executed plates and engravings that give force and impact to the text. For these and other reasons, not necessary here to enumerate, we are of the opinion that this work will take an important place in medical literature.

The author writes from an experience of twenty-five years as a teacher, yet he does not intrude his own opinions dogmatically, his aim being to present the consensus of the best experience on all questions of medical practice. To this end he has drawn upon authors in textbook and journal, approximating whatever he has found of value or that has withstood the test of clinical application. French divides his book into three general parts, the first embracing the principles of medicine; the second, dealing with practical medicine; and the third, describing clinical methods of examination.

Under the general division of principles of medicine the author considers the classification and causes of disease, path-

ology, and the bacteria of disease. The division relating to practical medicine is subdivided into ten sections, all dealing comprehensively with the general and clinical history of disease. In the final division in which clinical methods of examination are considered, the author writes most intelligently regarding examination of the blood, stomach-contents, intestinal discharges, urine, and sputum. This is a treatise that grows in favor with one as he examines it more and more, and we have somewhat reluctantly reached the conclusion that it is one of the most practical works extant dealing with the problems of internal medicine.

A MANUAL OF THE PRACTICE OF MEDICINE. By A. A. STEVENS, A. M., M. D., Professor of Pathology in the Woman's Medical College of Pennsylvania. Sixth Edition, thoroughly revised, enlarged and reset. Post-octavo, 556 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Flexible leather, \$2.25 net.)

Practitioners and students of medicine have become familiar with this popular manual, which first appeared in 1892. Its arrangement is excellent, being such as to facilitate ready reference to its multifarious subjects. The size of the book and its general make-up are of most convenient and substantial form. This edition has been thoroughly revised, the entire section on diseases of the digestive system, as well as many other articles having been rewritten. The importance of an accurate statement regarding our present knowledge of disorders of digestion cannot be overestimated, hence, the pains taken in that direction by the author will be appreciated by every reader of his book. We commend the manual as one of the cleverest yet presented on the practice of medicine.

LEA'S MEDICAL EPITOME SERIES OF PHYSICS AND INORGANIC CHEMISTRY. A Manual for Students and Practitioners. By A. McGLANNAN, M. D., Associate Professor of Physiological Chemistry, College of Physicians and Surgeons, Baltimore, Md. Duodecimo, pp. 216. Illustrated with twenty engravings. Series edited by V. C. Pedersen, A. M., M. D. Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. Price, \$1.00.)

The essentials of physics and inorganic chemistry are well arranged in this small volume. These two important topics are treated in a manner that will appeal to the student preparing for review or examination. There is no attempt at originality by the author, nor has he included doubtful or controverted questions. The aim is to present certain facts that lie at the foundation of these subjects in a manner that will attract the eye and impress the memory, and we think that he has succeeded in doing so most happily.

BOOKS RECEIVED.

Infant Feeding in its Relation to Health and Disease. A Modern Book on all Methods of Feeding. For Students, Practitioners, and Nurses. By Louis Fischer, M. D., Visiting Physician to the Willard Parker and Riverside Hospitals, of New York City; Attending Physician to the Children's Service of the New York German Poliklinik. Third Edition, Thoroughly Revised and Largely Re-written. Containing fifty-four illustrations, 357 octave pages. F. A. Davis Company, Philadelphia. 1904. (Price, \$1.50 net.)

Juler's Ophthalmology. Third edition. Revised and enlarged. A Handbook of Ophthalmic Science and Practice. For Students and Practitioners. By Henry E. Juler, F. R. C. S., Ophthalmic Surgeon to St. Mary's Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital, London. Octavo, 733 pages, with 190 illustrations and twenty-five full-page plates in colors and black. Lea Brothers & Co., Philadelphia and New York. 1904. (Cloth, \$5.25 net.) ffl

*The American Year-Book of Medicine and Surgery for 1904. A Yearly Digest of Scientific Progress and Authoritative Opinions in all branches of Medicine and Surgery, drawn from journals, monographs, and textbooks of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of George M. Gould, A. M., M. D. In two volumes. Volume I, including *General Medicine*. Octavo, 673 pages, fully illustrated; Volume II, *General Surgery*. Octavo, 680 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1904. (Per volume: Cloth, \$3.00 net; half morocco, \$3.75 net.)*

Diseases of the Eye. By L. Webster Fox, A. M., M. D., Professor of Ophthalmology in the Medico-Chirurgical College of Philadelphia; Ophthalmic Surgeon in the Medico-Chirurgical Hospital. Octavo, pp. 603, with five colored plates and 296 illustrations in the text. New York and London: D. Appleton & Co. 1904. (Price, \$4.00.)

A Manual of General Pathology. For Students. By Sidney Martin, M. D., F. R. S., F. R. C. P., Professor of Pathology at University College; Physician to University College Hospital, London. Octavo, pp. 521. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1904. (Price, \$4.00.)

Mother and Daughter. Advice to the Maiden, Wife and Mother. By C. A. Button, M. D., Holland, N. Y., pp. 153. Holland Medical Company, Holland, N. Y. (Price, \$1.00.)

Howe's Handbook of Parliamentary Usage. Arranged for the instant use of legislative and mass meetings, clubs and fraternal orders, teachers, students, etc. By Frank William Howe. New York: Hinds & Noble. (Price, 50 cents.)

Lectures on Diseases of the Nervous System. Second series. Subjective sensations on light and sound, abiotrophy and other lectures. By Sir William R. Gowers, M. D., F. R. C. P., F. R. S., Honorary Fellow Royal College of Physicians, Ireland, etc. Small 8 vo, pp. 250. Philadelphia: P. Blakiston's Son & Co. 1904.

Report of the Commissioner of Education for the year 1902. Volume 2. Washington: Government Printing Office. 1903.

Biographic Clinics. Volume II. The Origin of the Ill Health of George Eliot, George Henry Lewes, Wagner, Parkman, Jane Welch Carlyle, Spencer, Whittier, Margaret Fuller Ossoli and Nietzsche. By George M. Gould, M. D., editor of *American Medicine*. Duodecimo, pp. 392. Philadelphia: P. Blakiston's Son & Co. 1904.

The Complete Medical Pocket-Formulary and Physician's Vade-Mecum. Containing upwards of 2,500 prescriptions, collected from the practice of physicians and surgeons of experience, American and foreign. Also a special list of new drugs, with dosage, etc. By J. C. Wilson, A. M., M. D., physician to the German Hospital, Philadelphia. Third revised edition. Philadelphia: J. B. Lippincott Company. (Price, \$1.75, third indexed, \$2.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Volume IV. Thirteenth series. 1904. Philadelphia: J. B. Lippincott Company. 1903. Cloth, \$2.00.)

The practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume II. General Surgery. Edited by John B. Murphy, M. D., Professor of Surgery, Northwestern University Medical School. Duodecimo, pp. 566. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$5.50, payable in advance.)

The Worth of Words. By Dr. Raley Husted Bell. With an introduction by Dr. William Colby Cooper, 12 mo, pp. 332. Third edition revised and enlarged. New York: Hinds & Noble. 1904. (Price, \$1.25.)

Transactions of the American Dermatological Association. Twenty-seventh annual meeting held at Washington, D. C., May 12-14, 1903. Charles J. White, M. D., secretary. New York: The Grafton Press.

Transactions of the New York Academy of Medicine. Semi-Centennial Celebration, 1896-1901. 1896-1901, including the Semi-Centennial Celebration Addresses, January 29, 1897, and List of Papers read at Stated Meetings of the Academy. Printed for the Academy, New York, 1903.

Preventive Medicine. Two Prize Essays: The General Principles of Preventive Medicine, by W. Wayne Babcock, M. D.; the Medical Inspection of Schools, a Problem in Preventive Medicine, by Lewis S. Somers, M. D. Published by The Maltine Company, Brooklyn. 1903.

LITERARY AND JOURNALISTIC NOTES.

MARIANI'S COCA LEAF, Volume II., No. 5, January, 1904, contains many hints and suggestions relating to the use of coca and its preparations. It is a handsomely printed and well edited little periodical that will be sent on application to those who have not received it. Address, Mariani & Co., 52 West 15th Street, New York.

THE *Medical Library and Historical Journal* has entered upon its second volume. It is the only magazine of its kind published in the English language, its object being to promote interest

in medical libraries and their growth. It is the official organ of the International Association of Medical Librarians and will publish the transactions of this society as well as those of the leading medical historical societies. The journal is printed on a fine quality of paper, is freely illustrated, and each number contains from 80 to 100 pages. It is published quarterly and the subscription price is \$2.00 a year. The address of the editor is 1313 Bedford Avenue, Brooklyn.

THE *Daily Medical* made its first appearance Monday, February 8, 1904, as an eight-page newspaper. It has regularly appeared since that date, Sundays excepted, publishing four pages each issue. It contains telegraphic news, original communications, new inventions recently patented, and editorial matter, together with a few advertisements. The subscription price is \$1.00 a year. Address Dr. M. W. Curran, Managing Editor, 154 East 72d Street, New York.

THE *Medical Book News*, published by P. Blakiston's Son & Co., Philadelphia, entered upon its second volume in January, 1904. It continues to give interesting information upon recent medical publications and is a valuable aid to the literary editor of a medical magazine.

SCIENTIFIC BIBLIOGRAPHY.—J. B. Bailliere & Son, Hautefeuille St., No. 19, Paris, will soon publish a general catalogue of scientific works, comprising a detailed list arranged alphabetically, of names of authors embracing about five thousand works on medicine, natural history, agriculture, veterinary science, physics, chemistry, technology, and industry, with the date of publication, form, number of pages, figures and plates. An index of 17 pages, giving the names of authors of about 1,500 papers on scientific subjects is added. This indispensable bibliography of all the investigators will be sent to all readers of this Journal free of charge by writing Messrs. J. B. Bailliere & Son. A paid return postal card is sufficient.

THE *International Medical Magazine*, originally a Philadelphia enterprise but lately published in New York, has been discontinued. The publishers, Messrs. E. B. Treat & Company, while regretting the discontinuance of the magazine, invite the friends of that publication to transfer their interest to the columns of the *Archives of Pediatrics*, and thus extend its field of usefulness.

THE *Maryland Medical Journal* announces that its February number which was destroyed in the great fire that swept over the business portion of that city, February 7 and 8, 1904, is being republished in Philadelphia, and will shortly appear. This was to be the Tuberculosis Exposition number, containing papers by Knopf, Flick, Adami, Ravenel, Thayer, Hoffman, Salmon, and others. We regret the calamity that befell our distinguished contemporary, but are glad it will be enabled to carry out its original purpose in regard to its February edition.

THE *Interstate Medical Journal* for January, 1904, appeared in what it is pleased to call, an Annual Progress Number. It contained reviews of the several branches of medicine, editorial comment and book reviews.

THE fourth annual report of the work of the cancer laboratory of the New York State Board of Health, conducted at the Gratiwick Research Laboratory, University of Buffalo, for a period beginning in 1902 and ending in 1903, was transmitted to the legislature February 1, 1903. It was sent out in the month of December of the latter year. It contains the report of the director, Dr. Roswell Park, and several scientific papers prepared by Drs. Harvey R. Gaylord, Gary N. Calkins, G. H. A. Clowes, Herman G. Matzinger, Irving Phillips Lyon and Roswell Park. These all pertain to investigations bearing on the question of cancer. Many of the papers are illustrated with microscopic sections. It is the most complete exhibition of research work that has been published in this country relating to the origin, causes and nature of cancer. It will, undoubtedly, attract the attention of laboratory workers all over the world and reflects the highest credit upon all concerned in its preparation.

ITEMS.

THE Central Institute of Physical Therapeutics, at Rome, Italy, has published a handsome brochure of 81 pages, which gives a detailed account of the conduct of the institution from the date of its establishment to the present time. It appears, according to this booklet, that it was inaugurated May 8, 1902, in the presence of the authorities, distinguished personages, and a large gathering of citizens. It is one of the largest, best built, and

most completely equipped institutions of its kind in the world. Professor Charles Colombo is the director of the institute and since it was opened he and his assistants have treated over 7,000 persons, 74 per cent. of whom have recovered. The pamphlet is profusely illustrated and contains much interesting information.

Facetiae Medicorum is the title of a brochure recently issued by the New York Pharmacal Association, Yonkers, N. Y. It contains a collection of the wit and humor of medicine in prose, poem, and picture, gleaned from various sources, selected and reprinted from the files of the *Doctor's Factotum*. It will be sent to any physician on application to the publishers.

A HANDSOME lithograph in many colors of a Medicine Man of the Sioux Indians has been sent to every physician in the United States by the proprietors of the tongaline preparations and ponca compound. Any physician who has not received this unique and artistic reproduction of a famous Indian Chief can obtain it by writing to the Mellier Drug Company, Saint Louis.

LATE NEWS ITEMS.

DR. G. H. A. CLOWES, of the Gratwick Laboratory, Buffalo, delivered a lecture before the Buffalo Society of Natural Sciences, Friday evening, February 26, on Immunity from diseases, from a popular standpoint.

PERSONAL.—Dr. Chauncey Pelton Smith, of Buffalo, slipped on an icy sidewalk on the evening of the 25th of February, 1904, and fractured his left leg. As the JOURNAL goes to press he is reported as doing well and resting comfortably.

THE *Maryland Medical Journal* for February is just received. It contains a part of the series of papers on Tuberculosis, the remainder to be printed in the March edition.

AT the annual meeting of the medical staff of the Emergency Hospital, held recently, the following named officers were elected: president, William C. Krauss; vice-president, Benjamin H. Grove; secretary, Vertner Kenerson.

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ORIGINAL COMMUNICATIONS.

Diagnosis of Cholelithiasis and Cholecystitis, with Remarks on Medical Treatment.¹

By CHARLES G. STOCKTON, M. D., Buffalo, N. Y.

Professor of Medicine, University of Buffalo.

[T IS generally held that an important if not necessary feature in the etiology of cholelithiasis, is to be found in a disturbance of the epithelial lining of the gallbladder. Given a perversion of the nutrition of, and exudation from, the lining of this viscus and the formation of biliary calculi may be expected. A mass of evidence has accumulated which goes to show that, in the majority of instances, the disturbance in the lining of the gallbladder is most commonly brought about through the entrance of infection into the organ and the setting up of either a mild or severe cholecystitis. Statistics show that there are certain predisposing factors of importance, among which are age, sex, indolence, gluttony and constipation. The disease is most often observed in stout, constipated, inactive women of middle age or older.

So closely associated is cholelithiasis with cholecystitis, both in the matter of etiology and clinical history, that the diagnostician must necessarily consider both processes, and it is not always easy to separate the phenomena depending upon the one from those depending upon the other. In acute inflammation of the gallbladder occurring in typhoid fever with the presence of the pure culture of Eberth's bacillus, we have, perhaps, the most classic instance of uncomplicated cholecystitis; and yet, in operating for the relief of this condition, newly formed and relatively

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

soft gallstones containing living typhoid bacilli are sometimes found. In chronic cases following this infection calculi are almost invariably present. Naturally, the personal history of the patient as to age, activity, habits of life and previous infections, has some bearing in the diagnosis.

ACUTE CHOLECYSTITIS.

This condition usually gives rise to distention of the gallbladder, with either serous or purulent fluid. This accumulation of fluid depends upon the closure of the cystic duct as a result of inflammatory swelling, and the pouring out of an inflammatory exudate more or less rich in cellular elements of the blood and epithelium of the gallbladder, depending upon the activity of the process. The affection is accompanied by local and constitutional disturbances. Locally, there is increased tension, and the soft parts in the vicinity acquire an increased rigidity. The gallbladder may protrude below the liver, and may be palpated as a rounded mass, continuous with the right lobe of the liver, which, later, is usually somewhat enlarged. Not infrequently there is an accompanying localised angiocholitis, in which case there is likely to be also a more or less active and extensive pericholecystitis with adhesions.

The region is tender, painful, sometimes showing prominence upon inspection, and it is to be noted that the process occurs along the lower rather than upper border of the liver, affecting the right rather than the left lobe. The pain is sometimes very severe, sometimes only moderate, but is rarely altogether absent. There is usually continuous suffering, augmented by paroxysms of severe pain like the pain of biliary colic. The disease is accompanied by fever, usually with rigors or even severe chills, occasionally by marked remissions and sweating; as a rule, there is vomiting, often constipation with moderate tympanitis, at times accompanied by jaundice with its attending symptoms. A leucocytosis is to be expected, and I have known the white cells to rise to 25,000 or 30,000 even when pus was not present. The patient is sometimes gravely ill, and the destructive processes are so active that drainage by surgical intervention is necessary to save life. In other cases the inflammation subsides, to recur, perhaps, repeatedly. Sometimes during the periods of improvement numerous, small, soft biliary calculi are passed by the rectum.

From this description it will be seen that it is impracticable to differentiate between acute cholecystitis with and without cholelithiasis, and it is not always possible to distinguish between a purulent and a nonpurulent case. Sometimes the obstruction of

the cystic duct is relatively permanent, in which case there may result either hydrops of the gallbladder or empyema of the gallbladder. The development of either of these may be recognised from the large, elastic, rounded tumor occurring in the abdomen below the right lobe of the liver. In the absence of acute inflammation one would not expect to find a leucocytosis except when the contained fluid is purulent in character; but when the active inflammation has subsided, the leucocyte count cannot be depended upon as a positive guide, for then even in purulent cases, the count is sometimes not very high.

MILD OR SUBACUTE CHOLECYSTITIS.

While this condition is less frequently described by authors it must be one which often occurs and which undoubtedly, is often overlooked because the signs and symptoms are inconspicuous. One has the opportunity of studying this condition in cases that have begun as acute processes, but in which the inflammation has subsided. Here the severe pain and tenderness, the fever, digestive derangement and other symptoms markedly subside and some of them entirely disappear, but enough remain to hold the attention when once directed to the diseased part. The liver sometimes returns to its normal size, but usually is slightly enlarged, especially in that part of the right lobe lying immediately over the gallbladder. This portion of the liver sometimes still further enlarges and extends downward in "a tongue-like projection," the so-called process of Riegel. It generally may be found when gallstones are present, and when the local irritation is considerable and protracted.

Under these conditions the gallbladder itself is likely to shrink from the inflammatory thickening and subsequent contraction of its walls, and therefore is no longer palpable. Still one finds cases in which the gallbladder remains large, extending below the liver, even when the right lobe is increased in bulk. In such cases the walls of the gallbladder are usually thin, and the tumor may appear elastic upon palpation. A gallbladder which has once been inflamed is often adherent to the liver, the omentum, or the intestine. These persistent adhesions may give rise to a special train of symptoms. When the adhesions extend to the abdominal wall there may be a sense of tension or even pain when the patient assumes the upright position. When attached to the pylorus they may give rise to important symptoms which are most marked toward the completion of the gastric digestion, when the pylorus is most active, and there may result symptoms of food stagnation with uneasiness, pain and sense of distention, eructation of gas, water brash, ending with nausea and vomiting.

Symptoms resembling the above-named sometimes result from adhesions to the duodenum. In some instances of adhesions the symptoms are less localised, and there is found to be a vague disturbance of the entire digestive tract with accompanying auto-intoxication, constipation, diarrhea, or other digestive derangements.

The diagnosis of these adhesions is not always easily made, especially when no evidence of disease of the gallbladder can be determined by physical examination. A correct diagnosis is sometimes to be made by exclusion, and bearing in mind the fact that the symptoms develop subsequent to an attack of recognised cholecystitis, an intercurrent attack of biliary colic, when it occurs, will assist one materially in reaching a correct conclusion. When chronic irritation, varied by periods of mild inflammation, of the gallbladder exists, it may produce other symptoms that assist in the diagnosis. In some cases there is a sub-icteric appearance of the skin and conjunctivæ, often transient, which betrays the existence of occasional attacks of mild angiocholitis. Some patients are predisposed to attacks of distinct jaundice. At such time there is a sensation of weight, or even pain, in the right hypochondrium or epigastrium, tenderness at the juncture of the ninth rib and cartilage, and sometimes at the point of the twelfth right intercostal nerve, an inch from the spine. This, the so-called Boas sign, is only occasionally present.

Some patients suffer from a continued autointoxication, with bad breath and disagreeable taste, slight elevation of temperature, and characteristic urinary disturbance. Other patients go for years suffering more or less constantly in this way without having attacks of hepatic colic and, therefore, without a diagnosis being made. There are still other instances of mild cholecystitis with cholelithiasis that are even more difficult of recognition. Again, some of these patients complain of gastric symptoms, which are sometimes extremely vague and not to be differentiated from irritative gastric disturbances, such as arise so frequently from deranged nervous systems, reflex irritation, and the like. Occasionally there is complaint of severe attacks of gastralgia, not at all resembling ordinary biliary colic, yet of marked severity, and often regarded as a pure neuralgia.

Still, again, patients suffer from irregularity of the bowels, which condition disappears when relieved from the biliary disease. In fact the disease varies in severity of symptoms, ranging from cases having severe attacks of gallstone colic that accompany acute cholecystitis, to those cases in which the symptoms fail to attract attention, but in which gallstones are formed in a diseased gallbladder, and are only discovered accidentally or

after death. In a large proportion of instances in which gallstones are found post-mortem, there is no history to indicate that the patient had suspected the presence of cholelithiasis.

BILIARY OR HEPATIC COLIC.

When symptoms of biliary or hepatic colic occur at irregular intervals which sometimes can be traced to a preceding typhoid infection, or other known cause, it is the form of cholelithiasis most commonly met with. These attacks vary so greatly in their accompanying symptoms that it would be a difficult and tedious matter to describe them all. These differences in symptoms depend in part upon the location of the stone, in part upon the condition of the gallbladder and surrounding structures, and in part upon the resisting power of the individual. The diagnosis is sometimes obscured by the presence of carcinoma in the vicinity, and a tumor in the head of the pancreas may so press upon the ductus choledochus, with jaundice, digestive disturbances, and other symptoms that it may be mistaken for cholelithiasis. As a rule, under these circumstances, the gallbladder is distended and palpable. This group of circumstances was formerly confused with stone in the common duct accompanied by jaundice.

It has been pointed out by Courvoisier, however, that when stone in the common duct leads to obstruction, the gallbladder is not often distended, but on the other hand contracted. There is usually, but not uniformly, pain complained of when the stone is thus located. Jaundice is not invariable for the reason that obstruction is not usually continuous; the stone moves, or the inflammatory edema subsides, so that there are periods in which bile coloring matter appears in the stools. The jaundice fades to deepen with the reappearance of the obstruction. When the stone engages at the juncture of the cystic and hepatic duct and there remains, the resulting symptoms cannot always be distinguished from those following the presence of stone at the outlet of the choledochus. In the former condition the jaundice is apt to be persistent and the evidence of tension in the gallbladder is relatively continuous. Often there is constant distress in the hypochondrium, varied by pain, temperature, vomiting and other symptoms of gallbladder irritation. These cases are often very severe.

Biliary colic frequently occurs when the calculus has not invaded the ducts. Occasionally, the calculus engages in the opening of the cystic duct and through irritation, thus set up produces marked spasm of the viscus with intense pain. Colic attacks are probably not always produced from such behavior of the calculus, for the reason that sometimes we observe these attacks in cases

in which the calculus is quite too large to engage in the duct. In these instances the pain is probably produced by the irritation offered by the stone to an already diseased and irritated gall-bladder thereby producing swelling, occlusion of the duct and spasm of the viscus.

The sufferers from gallstone disease apparently have attacks of biliary colic induced by disturbances of digestion, over-eating and the development of a condition of toxemia usually described by the term lithemia. It would seem to me that under these circumstances the tissues of the gallbladder become more susceptible to irritation, just as patients who are victims of chronic appendicitis, tonsillitis or bronchitis may experience a re-ignition of the smouldering trouble through the development of the nutritive disorders just referred to. This is a point of some importance in diagnosis because the increased acidity of the urine which occurs in the cases just referred to, might mislead the observer into supposing that the pain came from irritation to the right kidney or ureter, or the group of symptoms which are sometimes experienced in those suffering from nephroptosis and which passes under the name of Dietl's crisis. There should be no great difficulty in deciding between these conditions, but I have known a difference of opinion to arise between physicians regarding them.

When in the course of cholelithiasis a severe and continuous pain develops with swelling and rigidity in the region of the gall-bladder, together with great tenderness, fever, vomiting and retching, and usually considerable tympanitis, we have reason to suspect that the patient is suffering from pericholecystitis. Some recent observers go as far as to attribute all cases of biliary colic to localised peritonitis. We should not forget that in the present instance at least there is a localised peritonitis, and that it may extend sufficiently to produce the gravest results. The danger of perforation should always occur to one under these circumstances. While in fortunate cases, as the result of ulceration, a passage may be formed between the gallbladder and intestines thus leading to drainage of the gallbladder, possibly the escape of calculi, sometimes of very large size, and even ultimate cure of the case, it too often happens that a perforation into the peritoneal cavity results from the process and following which a rapid septic peritonitis is to be expected. Many of the fatal cases of cholelithiasis follow this course.

MEDICAL TREATMENT OF CHOLECYSTITIS AND CHOLELITHIASIS.

Treatment seems entitled to brief consideration in this place. While it is not only useless but reprehensible to delay the assist-

ance which surgical intervention alone can bring to many cases, we are not yet in a position where it is proper to demand a cholecystotomy as soon as a diagnosis of gallstone has been made. The majority of cases can be greatly benefited by appropriate medical treatment, and many will completely recover by medical treatment alone. That which seems to me of the most importance in this medical treatment is the adoption of a regimen that will prevent the appearance of a lithemic condition, a state which experience teaches is likely to induce an irritable gallbladder and precipitate a seizure of biliary colic. In other words, the patient should not be allowed to become constipated, to have scanty and acid urine, to develop gastric derangement in which a coated tongue, disagreeable taste, flatulence and epigastric distress are familiar symptoms. Such patients should be made to eat simply, drink freely of water, pay special attention to the activity of the skin, exercise moderately and progressively, avoid excesses of all kinds, and assist in the elimination of waste matters by a course of alkaline saline waters, with the judicious taking of some preparation of salicylic acid. The plan selected must depend somewhat upon the resisting power of the patient, the condition of the blood, and the viscera; and the physician who understands how to avoid the recurrence of bronchitis in one subject to uricacidemia will be likely to understand the best method of preventing an irritable gallbladder. When the attack appears the spasm must be relieved, and for this perhaps morphine and atropine will be necessary.

When the pain is not intense it may be relieved and the attack aborted by the free administration of salol, sodium salicylate, aspirin, antipyrin, and similar preparations. The patient must be kept absolutely quiet, the alimentary tract emptied carefully without producing too much intestinal peristalsis and food must be denied. The drinking of water and sweating the patient are useful measures, and in a few instances the administration of pilocarpin has for more than one reason seemed to be of value.

As to the use of olive oil in relieving the symptoms of irritable gallbladder we have a good deal of recorded experience, and for the most part it is favorable. Some advise very large, others small doses. The plan which seems to be most serviceable is to administer a teaspoonful of oil every two hours for several consecutive days. In case the oil leads to derangement of gastric digestion it should be abandoned.

We shall undoubtedly do best in our treatment of these cases if we devote more time and thought to the conditions predisposing to the attacks.

DISCUSSION ON THE PAPERS OF DRS. STOCKTON AND CURTIS.¹

Dr. W. S. CHEESEMAN, Auburn.—I would like to ask Dr. Curtis whether he has formulated any rules in relation to the removal of the gallbladder?

Dr. H. L. ELSNER, Syracuse.—It seems to me these valuable contributions, on a subject which is interesting all of us, both physicians and surgeons, merit discussion. A great many points have been brought out by both the readers of the papers, and they need to be accentuated. For example, I agree with the statement which Dr. Stockton made, that in those cases of persistent cholecystitis, as a rule, with, but sometimes without gallstone formation, there is the characteristic enlargement of the liver which he describes, the tongue-shaped piece of liver which comes down and covers the gallbladder, which can be palpated before operation, and which often misleads the diagnostician, because he imagines he is dealing with an enlarged gallbladder, when in truth at the time of the operation we often find the gallbladder hidden beneath this piece of enlarged liver.

Then there is another point in connection with this, and perhaps Dr. Stockton's experience may coincide with mine—namely, that there is a change of color in the liver. I have noticed in these cases a leaden hue which we do not find in any other disease of the liver, and that leaden hue is associated with more or less localised cicatricial change. These livers after the gallstones have been removed and the gallbladder is drained return to the normal size, and the only trouble which we ultimately have if the gallbladder has been removed, or if all of the gallstones have been removed, is possibly due to some old adhesions, caused by inflammatory changes.

Another point which Dr. Stockton made, is the continued ill-health of these patients. In the interval they go about doing their work fairly well, that is, in these mild cases he referred to, but there is always a something about them which to the experienced eye shows they are not well. They may not suffer from acute infection, but there is the characteristic odor of these patients, there is the characteristic color, and the lassitude, the malaise, from which they do not entirely recover, and which brands the milder cases.

Now, with regard to the question of resistance in these cases. I recently saw a case in the person of a man at Cortland, who had had repeated attacks of cholecystitis with gallstone formation, and we diagnosticated the case through an obstruction in the common duct. The man had marked jaundice which persisted, and he had at the same time a marked aortic lesion, with very high arterial pressure. Then came up the question of operative intervention. We knew well this man had but little

1. Dr. Curtis's paper was published in the JOURNAL for February, 1904. See page 433.

resistance. On the other hand, we knew he had an obstruction in the common duct which would ultimately kill him. The wisest course seemed to us to recommend and insist upon operation. The operation was performed: the man with arterial sclerosis and advanced aortic lesion withstood the operation and made a complete recovery so far as his cholecystitis and gallstone were concerned. When you have the rigidity, the recurring pains, whether severe or mild to deal with, symptoms in the region of the gallbladder must be taken into consideration, and they need to be correctly interpreted.

The treatment, it seems to me, the more we see of these cases, the more we study the pathology of them, is fast becoming surgical. The results achieved by Reder, by Henschell, and the splendid results we have had in this country, justify operative interference; and I am convinced when we have these cases with persistence of symptoms, with rigidity in the region of the gallbladder, with pains even without gallstones, but with persisting adhesions, the rational treatment is operative. But, also, the treatment which has been so splendidly outlined, the rational treatment by medicine, hygiene, diet, and the like, is always to be considered.

Dr. CURTIS.—I wish to answer the question: all matters of technic I thought I had to exclude because of the short limits of the paper, and I have not time now to discuss the question of drainage or the removal of the gallbladder.

Uterine Myomata.¹

By A. L. BEAHAN, M. D., Canandaigua, N. Y.

UTERINE fibroids, properly speaking uterine myomas, have been of frequent occurrence during the past forty years. Though not found in native Africans, they are more common in American negro women than in the whites of any country. They occur as soft, rapid growing cystic tumors, uniform in contour, often misleading and simulating pregnancy, as multinodular hard masses, readily shelled out of inadherent capsules, or as polypi extrude from the uterus or remain in the uterine or cervical canal, being attached by a fibrous pedicle to the wall of the uterus. The soft variety develops at any age, and Tait found it was not influenced by removal of uterine appendages. The hard multinodular variety on the contrary, is associated with menstrual disturbances, as dysmenorrhea and menorrhagia, and is intimately related to the menstrual life. This is so true that if the menstruation is prolonged, suspicions are at once directed toward

1. Read at the 36th annual meeting of the Medical Association of Central New York, held at Auburn, September 22, 1903.

uterine myoma as a probable cause. Hemorrhage from this over-time menstrual life, probably irregular, always excessive, causing anemia and its sequences are the ends attained by these growths. These are classical, undisputed facts. We are not much wiser about this kind of a tumor than we were two or three decades ago, that is, as to its cause or its anatomy. There is but little need of reciting facts well appreciated, if not altogether understood.

How to diagnosticate uterine myomas is important. The rapidly growing soft tumors, occurring as they frequently do during menstrual life, are the most difficult. They simulate in many ways pregnancy. Dilating the uterus and exploring is, of course, undesirable. There is no operator of experience, perhaps, but has been mistaken except possibly by the open incision abdominal diagnosis. Even this has not proven a sure way and the pregnant uterus has been incised before the error has been discovered. The hardened cervix, irregular uterus, slow growth of the tumor, and severe hemorrhages, make the multinodular myomas easier to diagnosticate. Dilatation as a means for determining the presence of uterine growths is dangerous, as is the use of the uterine sound. Sloughing of the soft myomas is likely to result and in the hard forms the capsule may be perforated and the low vitalised tissue be harmed. If the appendages be adherent to the uterus, peritonitis may ensue. Between the dangers of sloughing of the growth and the consequent sepsis and inflammatory developments, life is imperiled and nothing gained that could not have been compassed by as safe means. The educated finger touch can discern more than the conjoined instrument and finger, or instruments alone. A bivalve speculum and a probe or sound or a Sims speculum with tenaculum to draw cervix well down and dilator to open the cervical canal are diagnostic techniques for determining diagnosis of uterine myomas, crude, unscientific, vicious.

Given the presence of uterine myomas, what shall be advised? Two salient features, hemorrhage and pain, must be appreciated. Anemia, exsanguination, impaired vital resistance, neurasthenia, mental depression and irritability mean a useless invalid life in which any accidental disease may kill. Pain due to pressure, to ulceration, softening and septic changes, or the extrusion of a pedunculated mass is significant but not so readily sifted in its bearings on the question at stake. The rapidly growing, soft myoma must be removed. No medicine, no tentative procedure is justifiable. The removal of the appendages will not stop the development of the growth, but the serous secreting membranes lining the sacculated interior and the soft mushy contents increase and proliferate unceasingly and uncontrollably.

The hard myomas, developing slowly, insidiously, if on the peritoneal surface cause at the most a local peritonitis; if under the uterine mucosa they give early only a modification of menstrual flux and disturbance, suggestive, but not pathologic, concealed and unmentioned among the category of woman's secrets. There are two extremes of views held by equally honest reasoners about hard uterine tumors. One which believes in early interference and contends that the dangers of fibroid polypi, degenerative changes, tendency to sarcomatous changes, pressure ulceration of surface peritonitis, or a low grade of peritonitis from tumor presence, concomitant disease of the appendages and the general constitutional disturbances, making toward chronic invalidism, warrant in the wealthy classes and demand in the toilers and wage-earning women, operative interference quite early in the major manifestations of this disease. The other extreme of view regards medicinal measures of expectant character, that is symptomatic treatment to be demanded. Ergot, cannabis Indica, hydrastis, aromatic sulphuric acid and gallic acid, represent the hemostatic drugs. Hot vaginal douches, rest in bed and some form of electricity or cold applied to spine are useful expedients. Uterine tinkering by means of specula and medicated swabs are commercial methods of treating uterine myoma.

The tonic treatment where building up becomes necessary must be by limiting the hemorrhages and supplying new blood. Rest in bed and hot douches with moderate medication is advised. The use of iron is of doubtful propriety, especially in heroic doses, but normal saline rectal enemas, care of the skin and other functions, with a general mixed diet and moderate amount of light alcoholic stimulants will be found beneficial. Too much officiousness on the part of the physician is a nuisance. The patient, from the nature of the disease, has a self-centered state of mind. True help must be negative, not accentuate, this morbidity. Frequent vaginal examinations and speculum applications are never needed and are not to be commended. The reason becomes emphatically obvious why uterine probes, sounds and curettes are dangerous when the capsule of the separate hard myomas are examined. They are often of delicate structures, sparsely supplied with bloodvessels and were it not that a small amount of blood supply suffices for their vitality, every traumatism would prove a disastrous climax.

The pathology of the uterine mucus membrane in myomatous conditions can be removed by gauze wrapped on a simple applicator. The mucosa is not intrinsically the diseased structure. It may be incidentally diseased by a fibroid polypus in its process of enucleation and expulsion. The use of curets of simple or bar-

barous type may have a moral effect on the patient's mind or the imagination of the operator. It may cut off a few bloodvessels and diminish temporarily that little of hemorrhagic area, but it is only then a temporising expedient and if a myoma is already being extruded, the injury inflicted to the compressed polypus will cause sloughing and sepsis. There is a justification in letting hard uterine myoma alone. There is no warrant in meddling and in this category, electricity must be placed. The question of whether a tumor is greater or smaller than at a previous examination is a large proposition to settle. The devotees of any fad can easily demonstrate to the mind of a confiding, trusting patient the improvement so much desired, and gas accumulations, retained feces, new positions of the growth, even the condition of the mind, the personal equation of the examiner, exclusive of questions of skill and experience, may add to the confusion of diagnosis in this particular form of disease.

The need for operative interference is determined by the condition of the patient's necessity for severe labor, the question of hemorrhage, pain, and complications as of sarcomatous degeneration, sloughing and ulcerative areas at points of pressure as against fecal accumulations in the rectum. The choice of operation offers a wide field. What success does this or that technic afford? The history of operative interference for uterine myoma is recent. In 1872, Tait began removing the uterine appendages to cure uterine myomas after witnessing two deaths in succession in enucleation cases,—a sad comment on the morcellation fad by this master of all gynecological minds. Considering the short history of cures of uterine growths and the brilliant plans evolved, it is no wonder that many methods have been employed. It would not be profitable to try to enumerate and describe these technics. What plan is safest for the greatest number of operators? Which gives the best results?

Statistics are not as reliable as wished for. It is necessary for us to digest all facts, observe results and form personal conclusions. In gynecological surgery, it being as stated a young science, this truth is especially patent. In our own country, with fertility of inventive genius, it is even more demanded that we sift for ourselves. Does morcellation of fibroids by the superior route, appeal to our judgment as wise? It is easy and one after another nodule may readily be enucleated, but are we sure that all the separate nodules are removed? If not, they will grow to the full size of such former tumors and require a secondary operation. Should morcellation be attempted from below? Never! It is bad enough to leave a flabby, bruised, oozing remnant of a uterus to hopeful phagocytosis in the abdominal cavity, but to

push up through the septic vagina and violently remove a fibroid tumor or nodule, disgraces surgery.

The vaginal route is only a sentiment. It needs no weighing in true uterine myomas. If malignancy has developed, this route, because of the demand for proper drainage, is the only way to proceed, but the vaginal vault is weakened by adopting the inferior route and nothing is gained of any account. Abdominal hysterectomy for uterine myomas seems the best means for their removal. Two plans are used. The first and oldest removes the uterus and tumor at the cervix, a constricting band encircling the cervix below the body of the uterus and its myoma, the stump being placed extraperitoneally in the lower angle of the wound and held there by proper devices till the part of tissue above the constriction separates and that about the incision shuts off the abdominal cavity, granulates and becomes sound tissue.

The second method, or the dropped pedicle requires the blood-vessels to be ligated on either side, including broad ligaments, round ligament and close to cervix. The fore and aft incision with flaps, and incision through cervix with approximation of flaps over the stump of cervix, the canal of which is planned to be closed by suturing, or the incision is fore and aft just at the cervico-vaginal juncture and closure is to be by peritoneum matching peritoneum, mucous membrane joining mucous membrane. What are the dangers of the superior route and complete, clean operative work? Hemorrhage, damage to other organs, as ureters, intestines, omentum or bladder and sepsis. The discussion of these matters is relevant. Given in either case a tumor of fair size and uncomplicated, the exceptions may always require a modification toward the other technic. Hemorrhage is especially to be dreaded in this anemic disease. Abdominal hemorrhages especially, even if small in amount, cause shock out of all proportion to the amount of blood lost and exsanguination makes tardy convalescence, slow healing, and invites sepsis by small resistance to pus organisms. The constriction method, best represented in the wire *serre-noeud* of Köberle, loses only the blood in the excised uterus and the small amount of the external and fore and aft incision. A description of this method step by step is as follows:

1. Opening of abdomen from pubes, above through linea alba of sufficient length to deliver myomatous uterus.
2. Expressing uterus, using myoma screw to expedite process.
3. Incision fore and aft well up above uterocervical juncture, avoiding at the sides the bloodvessels of the appendages and in front the bladder's reflection on the uterus.

4. Pushing down with gauze pads these fore and aft peritoneal flaps from off the uterus.

5. Placing hemostats on the peritoneal flaps, three in front and one behind.

6. Clamp with vaginal hysterectomy clamps, one on either side perpendicular to tumor at angle of fore and aft incisions, the bloodvessels of the appendages.

7. Place wire of serre-noeud about tumor tightly, just below clamps and hemostats, which are the guides to flap.

8. Apply two more vaginal hysterectomy clamps, one on either side to the vessels of ovaries and tubes.

9. Slightly tighten noeud.

10. Apply two pins crosswise; one near anterior cervical part, but just posterior to vaginal hysterectomy clamps to include the bloodvessels of either side. The second pin is put about one-third of distance from posterior side of included tissue.

11. Tighten serre-noeud after examining to see that the anterior and posterior flaps are drawn carefully, but not with over tension, into the bite of the serre-noeud and that no bladder fold is encircled by the noeud, to give latter a vesical fistula. The noeud is then tightly drawn by means of wrapping the wire about the jaws of a vaginal hysterectomy clamp and when the wire is well tightened, the end of the wire is wrapped by turns about the handles of the noeud. The tightening is increased by the key of the serre-noeud, just sufficient for hemostasis to be safe.

12. Cut off with bistoury the tumor and uterus above pins and ligate pedicles, using pedicle needle and the strong silk ligatures used in ovariectomy.

13. Draw fore and aft flaps over stump and suture toward each other, not necessarily together, to avoid retraction.

14. Retighten serre-noeud by means of key.

15. Introduce the abdominal closing sutures through and through, silkworm gut from above down, putting a No. 1 silk suture from peritoneum of one side to the stump and then to the peritoneum of other side of the incision, having crowded the stump hard down into the lower angle of the incision against the pubes and tying the silkworm gut sutures from above down, having first tied the peritoneal to stump suture, whose purpose is the immediate shutting off of the abdominal cavity. Secure union about the stump may be expected in forty-eight hours.

16. Tie to end of pins of one side, strong silk thread. Apply the edges of folded gauze, one piece against the other, over the stump, bring the ends of the silk thread over gauze and tie to the other side on ends of pins. A flat piece of gauze doubled is carefully insinuated from without inward on either side under

the pins to protect the skin from their pressure and a quantity of absorbent cotton is placed over stump and wound dressings and the many-tailed abdominal flannel woolen bandage applied.

This is the technic as practised so successfully by Dr. Joseph Price. Having personally examined many 'cases' at the Philadelphia dispensary of years' standing, the proof is positive that no sequels of hernia of abdominal wall or vaginal outlet were found. The dropped pedicle operation, popularised by Baer, is a fore and aft double flap tying often over hemostats on either side of cervix, first in ligaments and last close to cervix. The deep suturing about the cervix requires wide-cutting curved needles that leave over large openings not filled with the suture material. If the vagina is opened there is danger of sepsis. If the cervical canal is attempted to be closed, it cannot be done by suturing the walls of the canal together because this membrane does not unite readily and it is poor tissue to cut out a cup-shaped cavity from and then approximate because of its cartilaginous nature. It is difficult to avoid leaving a dead space under the peritoneal flaps on top of the stump. In the exsanguinated or profoundly anemic patient, this result invites sepsis, and sepsis in the depth of the pelvis under these circumstances means immediate septic peritonitis, or remote dead ligatures, abscess, adhesions and chronic invalidism. The dropped pedicle is the easier operation, but the point of possible septic infection is also dropped into the depths of the pelvis.

The recent renewal of morcellement, the catheterisation of the ureters, as a step of the operation is a quiet insinuating, persistent, unanswerable argument against the intraperitoneal method and against its safety because of danger of cutting or ligating ureters, secondary hemorrhage, dead ligatures and sepsis. Where adhesions exist, such an operation is the best, or where the tumor is very small in size and has ulcerated, a difficulty might be experienced in making a pedicle long enough to be grasped in the lips of the abdominal incision and be held by the pins and serrenoeud without undue tension. The dropped pedicle is less objectionable than the removal of the cervix, especially if vaginal gauze drainage is used, as then the vaginal vault is weakened, but the suspension of the cervix from the abdominal wall in the retroperitoneal method makes for the working woman a pelvic floor, better than senile changes give, and for any woman, makes for comfort and normal pelvic relations.

The vulnerable points of the intraabdominal and at present popular procedure have been covered. It remains to emphasise the like consensus of conclusions relating to the extraperitoneal abdominal method. The foci of infection are without, walled off

by the suture that closes the gap above the stump by the encircling raw surface of peritoneum that fastens with jealous care about the cervical stump and quickly closes the opening. No hemorrhage can be expected, no dead ligature anticipated, no dead space formed. The patient is at once comfortable and safe. The color comes to the lips as the blood is rapidly renewed. The bowels move soon; the kidneys assume quickly their functions, as shock is slight and at the end of ten days the abdominal silkworm gut sutures are removed. No pus should have developed, even in the stitch holes. Nothing is left in the abdominal cavity to ever cause trouble. The *serre-noeud* should be tightened every twenty-four to forty-eight hours, and the external part of the stump should be healed in about fourteen days, and at the end of four to five weeks the wound is soundly healed.

There can be no more gratifying result in gynecological surgery, none more safely applied by the large body of surgeons, now doing splendid and saving surgery in the remote places of the country; none, if statistics were carefully and honestly compiled, that should meet with warmer approval if properly appreciated and skilfully and faithfully carried out; none in anemic subjects so free from danger, than the operation for uterine myomata detailed in the foregoing description.

Reminiscences of Buffalo General Hospital.¹

By DEVILLO W. HARRINGTON, M. D., Buffalo, N. Y.

I HAVE been asked to say a few words this evening on the subject of hospitals in general and the Buffalo General Hospital in particular. The first authentic history of the founding of hospitals for the poor, was by the Buddhist priests in India, about 220 years before Christ. We have no record that seems authentic, of hospitals founded for the care of the sick and wounded in the early Jewish wars. Josephus in his history of that time makes no mention of hospitals.

The object of a hospital, is a place where patients may recover from sickness and injuries, in the shortest possible time with the smallest mortality and at least cost consistent with efficiency. Hospitals are in a way, a measure of the civilisation of the people. They are better adapted as to the nursing of patients, and better constructed and more numerous in proportion, as communities are more humane and more intelligent. As asylums for the sick and injured, they are the most splendid expressions

1. Delivered before the Nurses' Training School, March 11, 1904.

of wisdom and benevolence. So important is their proper and judicious management to the sufferer, that negligence in this respect may produce more injury than sanguinary battles.

Hospitals are to be considered from two points of view: first, to provide healthy and commodious homes and attendance, medical and surgical; and second, to provide schools of instruction for students in medicine and surgery. To Christianity solely, do we owe the institution of hospitals for the reception and care of the sick and injured. It was Christianity alone, which revealed the truth that all mankind are one and that human nature is the same in all.

Cesar states, that on the night preceding one of his battles, he ordered the sick and wounded to be sent to the nearest town. This precaution of removing the sick and wounded and collecting them in the towns where they could enjoy repose and first assistance, is the principle of the institution of military hospitals. Severus ordered the chariots to follow the army on the march for the conveyance of the sick and wounded. These are the first ambulances on record. As late as the sixteenth century, soldiers when seriously wounded were discharged with a small annuity, to find their way home as best they might, a practice founded on the economic principle which prevailed at that time—namely, that it cost more to cure a soldier than to levy a recruit.

The Hotel Dieu in Paris, is said to date from the end of the seventh century. The earliest record of hospitals in England, was about the end of the eleventh century. Hospitals were intended as a place of benefit to the poor, but in the earlier history of hospitals they often proved the reverse, on account of ignorance on the part of the administration of the true principles of health. This was largely due to the improper isolation and separation of contagious and infectious diseases. Another cause of mortality was improper ventilation. Formerly no arrangements were made for ventilation in hospitals, schools or churches. The want of fresh air aggravates all diseases, diminishes the power of resistance and increases the death-rate. The want of attention to the details of cleanliness has been a fertile source of hospital diseases. Faulty diet has also its influence on mortality, although its effects are not so easily traced.

Up to a comparatively recent date, hospital accommodations were confined to the large cities. The epoch of founding and building hospitals was the eighteenth century and that of building and founding of schools and libraries was the nineteenth century. Prior to these dates, estates and moneys were usually given to the church. This brought about the condition of things which existed during the reign of Henry VIII., prior to the Reforma-

tion, when the church owned or controlled about one-eighth of the property in England.

The Buffalo General Hospital was organized in 1855. The west wing of the present building (the first one built), was completed in 1858. The administration building was built in 1880 and the new building erected in 1897 and 1898. The first patient was a Mrs. Lawson, the widow of a clergyman. This does not seem so long ago when you realise that she still lives as an inmate of an old ladies' home in this city. My first entry into, and intimate knowledge of this hospital was in 1865, near the close of the civil war. Arrangements were made with the hospital authorities of the United States Government, for the admission of soldiers into this hospital, as well as into the Sisters of Charity Hospital, which was then located on Main, at the corner of Virginia street. These two hospitals were filled with sick and wounded soldiers, from, I think, sometime in 1864 until the close of the war.

In this old building were four wards. The wards were crowded with beds as close as they could be placed, and even the private rooms were filled with beds occupied by soldiers and the grounds of the hospital, east of the old building, were covered with tents filled with sick and wounded soldiers.

The medical officer in charge of this hospital, and also of the sick and wounded at Fort Porter and the Sisters' Hospital, was Major Crispell. He was a United States surgeon of wonderful executive ability and devoted his time to looking in detail after the care of each invalid soldier. The medical and surgical staff connected with the hospital was under the immediate charge of this surgeon. Drs. Miner and Eastman were the surgeons. Drs. Wyckoff, Rochester and Mixer were the attending physicians. Cases suffering from gangrene were occasionally sent here from the front. It was not uncommon for gangrene to develop in these overcrowded wards. It was only toward the close of the war that these patients were isolated and put in tents, or were removed to the second story of the barn which stood near where the contagious hospital is now located.

There were no trained nurses at that time. A Mrs. Peck had charge of the two wards upon the second floor, which were the surgical wards. A Mrs. Graham was in charge of the two lower wards which were medical. The two internes were Dr. J. N. Brown, who is now practising at Westfield, and Dr. E. L. Shurly, who is now in Detroit. The male nurse, or orderly, was a retired English soldier, by the name of MacDonald. He had lost an eye in the Crimean War and drew a pension from the English government. He had to go to Fort Erie to draw his

pension and usually came back gloriously drunk. He had a way of getting into the laboratory through the window and getting drunk on the hospital tonic, which was made from the formula of Huxam's tincture of cinchona.

The two female nurses in the surgical wards were two sisters by the name of Anna and Jessie Gibson. They were without any training as nurses and yet did good work under the instruction of the internes. One died soon after the war and the other married a soldier, is now living in Mayville, and draws a pension as an army nurse. The superintendent of the hospital at that time was William C. Bagley, a most conscientious and capable man. His wife was matron. A Miss Sarah Hare was assistant matron.

Antiseptics in the way of surgical dressings were entirely unknown at that time. The first antiseptic dressing in this hospital was used upon a soldier brought from the front, who had lain three days upon the field after being wounded and seventeen days with no covering but the heavens. It was pronounced a hopeless case by the attending surgeons and permission was given to the internes to use any dressing for the wound that they thought proper. Permanganate of potash was the remedy that suggested itself to them and this was used most thoroughly and effectively. I have a very distinct recollection of the interest which the entire staff manifested in this new method, as I was the patient.

The first hypodermic injection in this city or in Western New York was used in this hospital. The first use of the thermometer and the keeping of records of the temperature of patients, was in this hospital. The first successful skin-grafting in this hospital, was in 1870 or 1871. Dr. Miner at a clinic before the surgical class, tried this upon a patient at the Sisters' Hospital, but without success. The interne here at that time (my innate modesty prevents my mentioning his name), tried it upon a patient in this hospital the same day, with perhaps more care as to detail, and it was a success.

Visitors by the thousands, mostly women, flocked into these wards at all hours of the day. There were two reasons for this: one was the attraction which brass buttons always have for the female sex, and the other, curiosity, which is the strongest instinct in women. I remember a soldier by the name of Darrow, who had a severe wound of the forearm. As the nurses were dressing this one day, a kind-hearted young woman said to him, "Soldier, is that the only place where you were hit?" He glared at her an instant and replied, "Madam, would you like to see a man shot all to pieces?" Another soldier by the name of Peter-

son, who was a blacksmith, was having his leg dressed for a compound comminuted fracture. One of these sympathetic women said to him, "Soldier, were you hit with a minnie or a bombshell." "Madam," said he, "I was kicked by an army mule." There was no further interest manifested in his case. Another soldier who was around the ward on crutches was the center of an admiring group of sympathetic young women, who were asking him about the battle in which he was wounded, if the bullets fell around him, and if the shells were bursting in the air, and finally one of them asked him how he felt at this time. He said he felt as if things were coming his way.

A thousand memories, both humorous and pathetic, come back to me like a panorama and as vividly as if it were yesterday, when I think of the muster out and final home-going, during the closing days of the civil war.

"The story of the muster-out roll is, at best, but a sad one. We are carried back to the war and surrounded by its sad picture."

"'Killed, July 3, at Gettysburg;' and one thinks of Pickett's charge, or other incidents of that historic field."

"'Killed, May 3, 1863, at Marye's Heights;' and the compiler lays down his pen to dream again of that fierce charge which swept upward over the sloping fields of Fredericksburg."

"'Wounded and missing, May 6, 1864, at the Wilderness;' suggests a nameless grave, marked if at all, by a government headstone bearing the short, sad epitaph, 'Unknown.'"

"'Killed at Malvern Hill, July 1, 1862;' and there rises a picture of an artilleryman lying dead at the wheels of his gun."

"'Died of gunshot wounds before Atlanta, August 20, 1864;' tells of some lad who falls a grave long miles away from the village churchyard of his Northern home."

"'Wounded at Antietam, September 17, 1862, and died on the amputating table;' brings up the dire vision of the field hospital, that ghastly sequel to every battle."

"'Killed at Appomattox, April 9, 1865;' and one sees the dead cavalryman, who, falling in that closing battle of the war, died with home and victory in sight."

"'Died of sunstroke,' recalls the long march, the heavy road, the dust, the heat, and a senseless form lying at the roadside."

"'Killed on picket, September 15, 1863, on the Rappahannock;' suggests the star-lit river, the lonely vidette, an echoing shot, and a man dying alone in the darkness."

"And so it goes. There were no war stories that can equal the story of the muster-out roll. War is terrible, but the sequel is horrible."

The hospital grounds were enclosed at this time by a high picket fence. The brick guard-house which was torn down last spring, stood at the only entrance to the hospital grounds. An English soldier who had served in India and was at the Sepoy mutiny, was constantly on guard and no patient was allowed to leave the grounds, without a pass issued from the office. A large lot bounded by the hospital grounds, High, Ellicott and Goodrich streets, was not built upon and was used by the hospital as a garden. This continued, I think, until about 1875. All the water that was used in and around the hospital was drawn in a water-cart from the corner of Main and Virginia streets. There was a large cistern just east of the old building, into which these water-carts were emptied and the water was pumped from there through the building. The wards were heated entirely by large coal stoves.

My next entry into this hospital was as interne in the fall of 1869. There were no trained nurses during the two years and nine months in which I served. There was the same staff of medical and surgical attendants as in 1865, with the addition of Dr. Gay upon the surgical staff and Dr. Brown upon the medical staff. The internes at this time were designated as resident physician and assistant resident physician. Dr. L. H. Kitchell was my predecessor, and I served under him one year as his assistant. He was a graduate of Yale College and one of the brightest students ever graduated from the medical department of Buffalo University. He was energetic and thorough and to him I owe my earliest training in the practice of medicine.

When I became resident physician, after serving one year as assistant, Dr. P. W. Van Peyma was appointed my assistant. He was careful, capable and conscientious, traits which have characterised him all these years in his practice in this city. There was no pavement at this time on High street, and for several months during the year this street was almost impassable. The hospital had no ambulance during my service here; in fact, there was not an ambulance in this city. Patients were brought to and from the hospital in carriages, or in a wagon which the hospital owned, which I think had been bought second-handed from some grocer.

Upon the resident physician and his assistant, devolved all the work, including most of the dressings in and around the hospital, keeping records, putting up medicines in the laboratory and attending obstetric cases, of which we had a large number at that time. The resident physician and his assistant usually made their rounds together, as the service was of mutual benefit to both. When I first entered the hospital as assistant resident

physician, it was customary for the patients who were not confined to their beds, to sit around the stoves or remain in the washroom, during the rounds of the residents or the visiting staff. After a few days of this seeming carelessness, I suggested to my superior, Dr. Kitchell, and the superintendent, Mr. Bagley, that each and every patient be in or at his bed during the rounds of the residents or any member of the visiting staff. This was a marked innovation and the results were so satisfactory, that it has been carried out to the present time.

The consulting staff was Drs. Burwell, Strong, White, Loomis and Hauenstein. Most of the nursing at this time was done by those who had been patients in the hospital and during their convalescence had picked up a smattering of the duties of nurse or orderly. A detail was made from the convalescents to work in the garden, mow the lawn and keep the grounds clean around the hospital.

The Sisters of Charity Hospital and General Hospital alternated each year in the care of the marines or sailors from this port. This increased largely the number of patients each alternating year, and they were the worst class of patients that we had to manage. Card playing was prohibited at this time, as it was also when the hospital was filled with soldier patients. Soldiers accustomed to the liberty and license of three years or more of field service, objected seriously to this order. I remember a soldier by the name of John Sabin, the son of a Baptist minister and as brave a soldier as ever drew saber, who persistently violated this rule. For discipline, he was sent to Fort Porter, and, I think, kept upon bread and water for ten days. This he said was a worse punishment than his father had ever given him for a similar offense. He is now a prominent physician in a Western city. Cigarette smoking was prohibited and was one of the bad habits to which the internes were not addicted. I regret that I cannot say as much for the internes at present.

I would be remiss in this discourse did I neglect to mention the name of Charles E. Clark, one of the founders of this hospital and president of the board of trustees for many years. More, perhaps, is due to him than to any other man for the founding of this hospital and its successful management during its early days. I remember how anxious he was for the hospital to purchase the lot between the hospital grounds and Ellicott street, of which he was the owner or agent, and which could have been bought at that time for \$5,000.

Two hundred and seventy-one nurses have been graduated from the training school, which was founded in 1877. One of the beautiful spots in Washington, is Dupont Circle, in the center

of which stands a magnificent statue of Admiral Dupont, one of the old-time gallant officers of our navy. It is said of him that on his death bed he gave this toast: "Here's to my country, may she ever be right, but right or wrong, my country." May each and every one of you nurses and internes, ever manifest the same spirit of loyalty to the Buffalo General Hospital.

1430 MAIN STREET.

Justifiableness of Exploratory Operations.¹

By EUGENE A. SMITH, M. D., Buffalo, N. Y.

AT THE bedside of the patient the physician becomes the exponent of the art rather than the science of medicine. In the effort to diagnosticate the disease in a given case he may apply scientific methods to the best advantage and in the most approved way; yet time, an operation, or a post-mortem will show more or less than he diagnosticated, or, perhaps, that he was quite at fault in regard to some complication or unusual condition not at all expected. The mathematician solves his problem with certain given data, and thereafter he can name his formulæ to solve all problems in which such data are the factors. The physician cannot do this; he must always deal with an element of probability or uncertainty, arising from the many influences modifying the etiological factors of disease and the varying factors of susceptibility and resistance in the patient. Under seemingly quite similar conditions in given patients he cannot be absolutely certain of like diagnoses.

In the practice of medicine, men who deal most successfully with this element of probability or uncertainty are said by those of us who admire their ability, to be possessed of the so-called clinical sense. They are men who fail less often than the rest of us. They succeed more often by reason of acute observing power, experience and a tactful judgment, rather than from scientific knowledge. They may be greater scientists; they are always greater artists. As optimists we may declare that the great advances made in recent years in the science of medicine have made the art of medicine less uncertain, but we must admit that the art of medicine still halts, stumbles and limps in the footsteps of scientific medicine, and will do so till the end of time, no matter what advances the future may have in store.

It is my purpose to talk tonight of one of the tendencies creeping into the practice of medicine, going with and due to the

1. Read before the Warren County (Pa.) Medical Society, December, 1903.

advances of medicine, or to speak more specifically, surgery. This tendency is fostered by the element of uncertainty in the practice of medicine already mentioned, and the comparative safety of surgical work due to modern asepsis and antisepsis. I speak of exploratory operations which have become a reproach to surgery in so far as they make us less careful in diagnosis, and more dependent upon the knife to determine pathological conditions. If this evil grows, it may some day be said that the forefathers in medicine, with fewer scientific means of clinical study, diagnosed more correctly at the bedside than we who have modern pathology and modern laboratory methods to aid us in interpreting clinical facts.

To all of us it should be a gratification and a pride to make correct diagnoses. Outside and above the considerations of a selfish or pecuniary nature which reward the physician for correct diagnostic work, medicine in a broad sense is elevated, there is lessened opportunity for criticism of the profession, and quackery and ignorance are confounded. The more exact the diagnosis the more the sufferer benefits, and in assuming the responsibility of his case we are in duty bound to give him our best judgment after close study—first, to determine his illness, and, second, to treat it. To satisfy our own consciences, therefore, we must make our patients the unconscious critics and censors of our work in the light of our results.

The conscientious diagnostician realises that his error is dangerous to his patient. The erring diagnostician becomes a blundering clinician and is dangerous to the community when he is too obtuse to profit by his errors, and has, withal, the courage, or, in this sense we may better say, the hardihood to stand upon his convictions. Such diagnosticians do not take their gross errors with sufficient humiliation and self-reproach. They ignore the minor, less disastrous ones. They consider the patient and his friends unreasonable because a professional mistake, perhaps seriously affecting the patient, is discussed by the sufferer and his friends without equanimity and with criticism. Such medical men are prone to recommend or make use of the exploratory operation, and they advise operation in the expectation of finding something wrong which they are hopeful surgery can correct. Built on such a basis, their views of operative work are justly regarded with suspicion by the profession, although they are plausibly put to use in duping the laity. We may drop the discussion of this class of men with the observation that they are certain to retrograde unless, happily, they see the error of their ways and develop a conscience and sense of responsibility.

The art of medicine progresses with the science of medicine. Let

us welcome every advance which makes diagnosis more accurate, treatment more beneficial, and prognosis more exact. Following Lister, the pioneers in antiseptis and asepsis have pointed the way to modern operative work with its comparative freedom from the old time danger of sepsis. Laboratory and clinical methods have also developed until diagnosis is far more certain in the practice of the willing worker, anxious to make use of the fullest opportunities to interpret the signs and symptoms of disease. When diagnostician and operator working, alone or together, strive to make the knife the means of curing disease and not a means for diagnosing it, exploratory operations of objectionable type will seldom occur.

Before entering upon a closer discussion of exploratory operations, the investigating feature of all operations should be discussed. All operations are more or less exploratory, dependent upon the element of probability or uncertainty already discussed. A simple operative indication may lead the surgeon into operative problems far more extensive and serious than were expected. All surgeons usually lay out instruments and consider procedures which may be necessary for probable complications in a case about to be operated upon, although these complications are not diagnosed nor expected. The surgeon who best plans his work to meet all contingencies before operating is the best surgical strategist. The pair of scissors, the hemostat, the needle and catgut which Robert Morris affects, were sufficient on one occasion when I saw him do a nephropexy, but he had to pause in operating, awaiting the sterilisation of a pair of bone forceps to remove the coccyx for coccygodynia in the same patient. The exploratory element in operations is typically seen in many cases of obstruction of the bowel in which the cause of the obstruction is unknown. Here abdominal section is undertaken to relieve the obstruction. The operation made necessary by the cause of the obstruction follows the exploratory opening of the abdomen, and may be any one of several standard operations depending upon whether the cause is within the bowel, without the bowel, or in the bowel tissue itself.

No one questions the advisability, the justifiableness, or the benefit of operations distinctly indicated for the relief of conditions only to be treated surgically, when the exploratory element is of minor importance in the diagnosis. When, however, the exploratory element in an operation becomes more and more pronounced, and the question of benefit to be derived from the operation becomes more and more problematical, the decision as to the advisability and justifiableness becomes more and more difficult.

From the ethical point of view we may divide exploratory operations into two classes, the first of which we may name justifiable exploratory operations, and the second unjustifiable exploratory operations. The justifiable exploratory operation is done on a case in which diagnosis or surgical indication is obscure, or in which both are obscure, but which promises possibility of benefit to the patient, and is indicated to relieve suffering or to avert impending danger. Obscure traumatisms, deeply placed tumors, septic conditions, and chronic conditions resulting from these causes, lead us often to justifiable exploratory work. In a general way we may instance cerebral or abdominal visceral injuries, septic peritonitis, either local or general, or tumors in the cavities of the body, as conditions which we often vaguely diagnosticate as to pathological cause, correctly diagnosticate as to operative need, and successfully attack when exploratory incision reveals the exact diagnosis.

When in these conditions a cause of dangerous disease is found which can be remedied or removed, success caps the popular and professional verdict of approval of the exploration, and the physician's judgment is commended. It does not follow that the physician is to be condemned for having done an unjustifiable exploratory operation, because at times hopeless conditions are found upon exploration, such as inoperable tumors. Such operations border on the unjustifiable, and are at best useless, or unwise. They are unjustifiable if careless diagnostic work was lacking before resort was made to the knife; in other words, the knife was unjustifiably used if diagnosis could have been made by careful clinical and laboratory methods. An error in judgment may lead to an unwise justifiable exploratory operation. For example, we may open the abdomen to find the cause of acute general peritonitis, the condition of the patient being such that his ability to survive operation is in question. Recently I lost a patient just after operation who died from acute general peritonitis, which I found was due to a hopeless condition of suppurative pancreatitis. In such a case a post-mortem to find the cause of disease would have been wiser than my antemortem operation. Death on the table or shortly after operation is a reproach to surgery and the surgeon's judgment. The man who declines to operate in dubious cases has fewer failures to his discredit, but, in my opinion, it is better to err in the patient's behalf in many cases in which it is difficult to decide whether operation is justifiable or not. Occasionally, seemingly moribund patients will rally under stimulating treatment after operation to relieve a condition which was necessarily fatal without operation.

At times we lean too far away from exploratory work in our attitude of disapproval of exploratory operations. Recently I operated, on a Friday evening, for acute general peritonitis, the history of the patient's illness dating back to the previous Tuesday morning when he was kicked by a horse in the abdomen. During Tuesday, Wednesday and Thursday he had abdominal pain without fever or rise of pulse. Alarming illness began Friday morning after cathartics were given. I found that bowel perforation due to sloughing of a portion of the wall of the ileum, no larger than a five-cent piece, was the cause of peritonitis. He died. Earlier exploratory operation might have saved his life. Circumstances of time, place and conditions, a good or a bad history in a case, and other factors may determine a justifiable exploratory operation, when under different circumstances the same case operated upon would come under the head of unjustifiable exploratory operations.

Battle field surgery deals with exploratory operations in the cavities of the body, mainly because of hemorrhage. When necessity does not compel, exploratory surgery is referred to base hospitals for better facilities and greater safety. Advanced age and infancy are deterring factors in exploratory work, yet an infant may be saved by abdominal section for bowel obstruction if the cause be remediable as, for example, intussusception. In the unconscious patient with vague history of skull injury, localising signs pointing to cerebral compression call for exploratory trephining. This does not hold true in the unconscious patient with arteriosclerosis and evidences of tertiary syphilis. The pathological condition in appendicitis is generally not to be diagnosed by the clinical signs and operation, in this disease, has always an exploratory feature in acute cases.

A patient seen at midnight in the country suffering from appendicitis even though it seems to be subsiding is safer after immediate appendectomy than under conservative treatment. The same patient in a hospital ward might be treated conservatively twelve or twenty-four hours, or longer, or, perhaps, until the attack subsided, awaiting the quiescent period for operation. Exploratory needle puncture of the thorax is a procedure scarcely to be dignified by the name of an operation. But when such puncture shows the presence of fluid, the exploring needle decides the operation, either aspiration for hydrothorax or thoracotomy for pyothorax. Exploratory puncture is entirely justifiable and should be urged in the dubious cases in which differential diagnosis between pulmonary consolidation and pleural effusion is obscure. In my experience in consultation work, it is a diagnostic procedure too often neglected or postponed, with serious dis-

aster resulting to the patient, especially in cases of empyema diagnosticated to be slowly resolving pneumonia.

Justifiable exploratory operations upon the contents of the skull are undertaken more and more frequently as shown by the reports in medical journals. Careful diagnostic work to determine the cause and location of compression is rewarded by successful trephining to relieve clot due to extradural and subdural hemorrhage, depressed bone abscess or tumor. Properly selected cases of epilepsy are benefited or cured by such operation. Differential diagnosis between cortical and subcortical or basilar lesions producing intracranial pressure is often extremely difficult, and with syphilis and traumatism excluded the differential diagnosis of cause may be also a problem. In the light furnished by the history and careful diagnostic work looking to cerebral localization of the disease, exploratory trephining is justifiable and may be life-saving. In contradistinction to justifiable exploratory operations, unjustifiable explorations are done on cases in which diagnosis is obscure or the surgical indication is weak, and which give small promise of benefit to the patient by averting danger or lessening suffering. From the ethical point of view the element of hope in the exploratory work is the redeeming feature, which places this class of operations on a plane a trifle above operations which are altogether unjustifiable. In the hands of the careless diagnostician unjustifiable exploratory operations are unnecessary or useless, or dangerous; as, for example, exploratory incision of an aneurism. In the hands of the over-bold operator they are experimental or rash. In the hands of the unscrupulous operator they are reckless, and under stress of pecuniary temptation they are altogether unjustifiable and they may be criminal. If we may so speak their highest recommendation is the euthanasia they too often give the victims.

Speaking of diagnosis of disease within the abdominal cavity, some men speak of the abdomen as a "grab-bag." The man who regards the abdomen as a cavity to open and explore upon any and every opportunity, differs essentially from the man who regards the abdomen as a cavity to percuss and palpate after clinical study of the patient, with a view to decide what definite diseased condition needs medical treatment or surgical operation. The first man does unjustifiable exploratory operations. The second, as a rule, is justified when he does an exploratory operation. Asepsis lessens danger in surgical work. We must not let asepsis weaken surgical conscience and surgical judgment. The surgeon is not complimented who is called dextrous, whose operative technic is said to be perfect, but whose judgment is called poor. We might

say of him that a good carpenter was spoiled to make a poor surgeon.

In conclusion, we may sum up much that is discursive in a paper of this kind by stating that exploratory operations are unjustifiable and are not to be recommended in so far as they are undertaken without careful clinical study of the patient and without painstaking use of the laboratory aids within our reach, and when the surgical indication is not dependent on trouble in the region to be attacked. An error in judgment may lead a conscientious surgeon to make an occasional operation properly classed with unjustifiable exploratory operations. Habitual recourse to exploratory operations by a surgeon must result in many unjustifiable operations, and becomes an error in ethics.

1018 MAIN STREET.

Cholelithiasis.¹

By W. E. DIGNEN, M. D., Buffalo, N. Y.

HISTORY.

GALLSTONES are seen so frequently nowadays, that it is astonishing to find so little mention of this condition among medical authors of antiquity, who are otherwise renowned for the accuracy of their observations. No data are given in the writings of antiquity that allow us to infer with certainty that the physicians of that day knew of this disease, nor is there any description that would lead us to believe that cases described were sufferers from gallstones. In the writings of Hippocrates and Galen, it is true, we find a few brief communications on pain in the hepatic region, on icterus as a result of constipation without fever, but these descriptions, as compared to the precise and exact communications on renal colic, convey only a very inadequate idea of hepatic colic. Nowhere, furthermore, do we find mention of concretions in the bile passages and in the gallbladder. The discovery of stones in the stools is mentioned, and we are possibly justified in seeing a connection between the two. In view of the fact that the old Greek physicians were good clinical observers, and at the same time thorough students of anatomy, we are forced to the conclusion that gallstones were less frequent in those days than they are in modern times. An explanation for this difference might be sought in the mode of life. The people

1. Read at the meeting of the Roswell Park Medical Club, February 1, 1904.

of Greece ate other food, and their whole regimen was different from ours. The food, moreover, was prepared in an entirely different manner than nowadays, and meals were simpler. Physical exercise was an important factor during the years of adolescence, forming a large part of the curriculum of every youth, and in later years men continued to indulge in much and varied physical exertions. The clothing, too, did not cause anything that is analogous to our corset liver.

In the middle ages medicine made very little progress. It, therefore, does not astonish us to find little mention of gallstones. According to Donatus, it is true, Gentilis of Foligno, in the fourteenth century is said to have found stones for the first time in the gallbladder and the cystic duct of a corpse that he was reëmbalming. No definite statement in regard to the discovery is made in his works. In the fourteenth and fifteenth centuries, concretions were discovered in other organs. Gallstones were first mentioned by Antonine Benevenius, who died in 1592. He describes gallstones that were seen in the case of a woman, who had been a sufferer from pain in the abdomen. They were found both in the gallbladder and in a sacculated cavity on the surface of the liver. He assumes that the death of this patient was caused by these stones. Coelius Rodiginus and Lange subsequently reported similar cases. Vesalius and Fallopius, in spite of their exhaustive anatomic knowledge, say very little on concretions in the liver and the gallbladder.

Fernelius, in 1554, gave a very good description of gallstones and the symptoms which they produce. He seems to be familiar with the fact that occlusion of the ductus choledochus leads to a swelling of the gallbladder, a white discoloration of the feces, and the passage of dark urine, and that, in the occlusion of the hepatic duct, the gallbladder is empty. He further states that the concretions seen in the gallbladder are usually black and of a low specific gravity, so that they always float on water. This is a wrong impression. He thought that they formed from the bile when the fluid could not be evacuated, or remained too long in the gallbladder, or was not renewed. He also states that they are especially seen where an occlusion of the cystic duct exists. Columbus, who died in 1557, reports that in the liver, portal vein, kidneys, and lungs of the Jesuit general, Ignatius de Loyola, numerous concretions were found. Matteoli believed that the formation of stones occurred from the thickening of the bile and mucus as a result of an elevated bodily temperature. In this respect he followed the old theory of Galen, who assumes that all concretions of the body are formed in this manner. The same author makes the statement that stones in the gallbladder are probably

more common than is usually assumed, and that they frequently pass unnoticed or are confounded with intestinal concretions.

Paracelsus, freeing himself from the influence of Galen, introduced clinical observations and chemical investigations into the study of medical phenomena. He brought about a complete revolution of views in regard to the nature of gallstones. His doctrine of "tartarus" is based on the belief of chemical changes within the organism. He mentions (1563) stones in the liver as precipitates of impure material brought about in the same way as wine-stones from wine. Paracelsus was familiar with jaundice and the attack of colic that accompany gallstones. He believed in heredity as a predisposing cause of gallstones. He treated his patients by regulating gallic digestion by the administration of amara, acids, and carbonated waters.

Johann Kentmann, in 1665, describes gallstones of different sizes and shapes, and illustrates them. He states that the more numerous they are, the more they assume the angular shape. Ferrandus, in 1570, published a case of rupture of the gallbladder caused by a large gallstone, followed by pouring out of the bile into the peritoneal cavity. From this time on the nature, character and causation of gallstones was more definitely understood. Stones of various shapes and sizes were described by different authors. Branched stones were found in the hepatic duct, that were difficult to remove, so they remained in the body until the death of the animal or human being. The anatomical observations of Glisson (1654) were of fundamental importance in the further development of our knowledge of gallstones.

Ettmüller states that icterus does not necessarily follow gallstones, and that gallstones may be present in the gallbladder without causing icterus. He bases these statements on his knowledge of the fact that the gallbladder can be extirpated without endangering the life of the animal, and he quotes the important experiment of one of the students in Leyden, who extirpated the gallbladder in a dog without observing any bad results. According to this author, there is no remedy for gallstones. The discovery of glands in the walls of the gallbladder and the bile passages was important for the understanding of gallstone pathology. We are indebted to Morgagni for this discovery.

Sydenham gave us much light on the pathology of gallstones, but considered gallstone colic as a hysterical symptom. He describes the symptoms of cholelithiasis at great length, mentioning icterus, but says nothing whatever of gallstones. In the second half of the eighteenth century, Haller and Morgagni gave us important data on the pathology of the diseases of the gallbladder. They give a detailed description of the appearance, color, form,

and structure of gallstones, and opposed the erroneous idea prevalent at that time, that dark stones are seen in old people and light ones in young subjects.

The surgical treatment of gallstones was inaugurated by Sharp and Moranel. Bloch, in 1774, proposed the artificial formation of adhesions in the region of the gallbladder, ligation of cystic duct, and the incision and extirpation of the gallbladder as early as 1767. About fifty years later Meckel von Heimebach emphasised for the first time the significance of catarrh in the formation of concretions. In recent times, Charcot led the French investigators in diseases of the gallbladder. However, Kocher and Sims are really the fathers of modern gallstone surgery, since they first attempted cholecystotomy. Recent surgeons have contributed much to our knowledge on the subject. The microorganisms most frequently found are members of the colon group and the bacillus typhosus. So constantly is one of these forms present that Gilbert and Fournier divided cholelithiasis into two groups; first, those due to the colon bacillus, and second, those due to the bacillus typhosus.

The two most common ways of bacterial infection of the gallbladder are by way of the bloodcurrent, or from the intestine. Since the bacillus coli is the microorganism that is most frequently seen in the gallbladder it would seem most probable that it entered from the intestine. Among the other most frequently mentioned causes of gallstones are stasis, constriction of the body by tight clothing, pregnancy, sedentary habits, certain diseases as gout, rheumatism, diabetes, obesity, arteriosclerosis, and advancing years.

SYMPTOMS.

Symptoms appear when the stones are causing inflammation and ulceration of the walls of the bile passages, or when stasis of bile occurs, and, as a result, pus-forming microbes gain an entrance into the bile passages and develop there, causing violent inflammatory reaction. Gastric and intestinal disturbances are of uncertain value as symptoms,—there may be no sensation of heaviness in the hypochondriac region. If it appear, however, this sensation changes its location with the changes in the location of the body. The patient may complain of dull pain in the right portion of the epigastric region, radiating toward the hypogastrium, the thoracic organs, the right shoulder, or the lumbar region. Slight errors of diet may be followed by nausea and vomiting of bile-colored masses.

The attack of gallstone colic usually begins with violent pain. Suddenly, as a rule, after midnight, or during the late afternoon

hours, a boring, stabbing, or tearing pain is felt, this usually being so violent that the patient becomes very excited, screams, shrieks, or moans. Pain is frequently localised in the right hypochondriac region in the sight of the gallbladder. In some cases it appears to be in the epigastrium, or it may even be felt in the left hypochondriac region, or in the mamma. It radiates in all directions, towards the abdomen, chest, back; occasionally toward the right shoulder, the extremities, and, less frequently, toward the genitalia.

The pain may remit temporarily only to be renewed with greater violence. It is chiefly due to the spasmodic contraction of the musculature of the bile passages, and to pressure on the sensitive mucous membrane. The demonstration of the presence of gallstones in the stools is, of course, of paramount importance in determining the cause of an attack of colic. They are not always found in gallstone colic.

COMPLICATIONS.

Complications may consist in infection of the bile passages by virulent pathogenic bacteria, followed by cholecystitis and cholangitis, or by formation of abscess of the liver. If the stone becomes impacted, we may get ulcerations, strictures, formation of pockets and separation of parts of the ducts. Grave icterus may occur. Carcinoma, typhoid fever, cholera, or pneumonia may complicate. One of the most important complications is the formation of fistulous tracts between the gallbladder and the bile passages on the one hand, and the intestinal tract on the other. The most frequently formed fistulæ are between the gallbladder or the common duct and the duodenum. An abdominal fistula may form, through which stones may be passed. Cirrhosis of the liver is not infrequently seen. Impaction of the intestine may cause ileus.

PROGNOSIS.

As cholelithiasis generally runs its course without disturbance and most rarely causes complicating inflammation of the bile passages, and the tissues surrounding them, the prognosis, as a rule, is favorable. Complications make the prognosis less favorable.

DIAGNOSIS.

In the diagnosis of cholelithiasis all the symptoms must be considered. If the gallstones remain quiescent, the diagnosis may be very difficult. An attack of colic may be the first positive sign to reveal the presence of gallstones. The other symptoms come in their regular order.

TREATMENT.

The treatment of gallstones will depend greatly upon the presence or absence of complications; that is, whether the object desired is simply to remove gallstones that may be present, and thus do away with the symptoms that are caused by their presence, or whether the disease is complicated by cholecystitis, and cholangitis, and it is desired to cure or relieve these conditions. In the former, the regular form of gallstone disease, dietetic measures, the drinking of certain waters, and treatment with drugs must be chiefly considered. In rare cases only will it be necessary to consider the advisability of surgical measures from the beginning. The most suitable diet seems to be a mixed one, containing plenty of proteids not too scanty or uniform, so that an abundant quantity of bile acid is produced, and so that the flow of bile may be stimulated and maintained. It is a good plan to advise frequent meals, only three hours apart, during the course of the day. Plenty of pure water should be ingested.

As gallstones are soluble in alkaline fluids, alkalies were recommended for the treatment of gallstones, even as early as the eighteenth century. They are employed mainly in the form of different mineral waters. Warm saline waters have also been recommended for this purpose. The administration of fats, particularly of certain oils, has been highly recommended. Their value is still uncertain. Turpentine and chloroform have their advocates. The duty of the physician is, first to alleviate the suffering, then to attempt to cut short the attack by promoting the passage of the stone and, finally, to prevent complications. For pain, morphine, belladonna, antipyrin, and phenacetin, and preparations of the salicylates are of value. Inhalation of chloroform should be administered only in cases of exceptional excitement. Heat and cold may give relief. The bowels should be freely opened. If these means do not afford relief, surgical interference should be advised. Operative procedures should be at once advised,—if signs of suppurative cholangitis, of cholecystitis, or if incipient peritonitis appear.

Dr. B. F. Curtis in a recent article (*BUFFALO MED. JOUR.*, February, 1904), sums up the advantages of operation before grave infection has taken place in this manner: (1) the avoidance of such accidents and the improvement of existing inflammatory conditions; (2) the removal of the stone before it enters the common duct, with the dangerous consequences likely to follow; (3) the prevention of severe attacks of colic and cystitis; (4) stoppage of calculus formation; (5) the fact that latent cases are by no means free from danger, so that recovery from one attack of

colic is no evidence that another one will not occur, or that other stones may not remain behind, or chronic cholecystitis persist; (6) it seems to be the general experience that in the latent cases while the patient does not have symptoms pointing directly to the bile passages, they are afflicted with various dyspeptic complaints which can be entirely and completely removed by operation.

I will conclude this paper by offering a report on a recent case:

Family history negative, except that of mother, who died at 36 years of age with stomach trouble, the exact nature of which is not known, probably, however, of gallstones. Personal history: woman, 38 years old, German, married, mother of four children, three living and healthy, one died in infancy of pneumonia. Patient came to United States when 25 years old. One year before coming here she had fever, jaundice, and pain in region of liver. Her side never felt quite well since that time. It felt cold and at times heavy. Pregnancy made no difference with it. Always worked hard and called herself healthy up to the present attack. Never had biliary colic.

Present attack: October 3, 1903, I was called to see this woman. Found her in bed suffering from pain, which was referred to stomach, vomiting and chills which were followed by fever. Upon examination I found a tumor which extended from the hypochondriac region into the left umbilical region. It was freely movable. After a few days rest in bed the tumor was much reduced in size and at times could not be found. At other times it could be felt to the right and above the umbilicus.

On October 17, Dr. Rooth operated and found the gallbladder as large as a man's fist, adherent to the liver and surrounding tissues, the walls $\frac{3}{4}$ inch thick. The mucous lining of the bladder was thickened and denuded, lying in loose folds in the bladder. I exhibit 115 stones that were removed. Three are the size of horse-chestnuts, the others smaller. This large stone lay in the bladder at the beginning of the duct and was so tightly wedged in that none of the small stones could get past it and into the duct to cause pain, hence no biliary colic occurred. There was room for bile to pass it, so there was no jaundice. The weight of the whole number of gallstones was 800 grains. The three largest had an average weight of 150 grains each. This woman made a good recovery and is now doing her own work, caring for a family of five.

544 PLYMOUTH AVENUE.

DISCUSSION.

Dr. WILLIAM MEISBURGER.—I remember a woman who presented no particular symptoms, and upon whom Dr. Mynter operated and found four large and two hundred small gallstones. After some time the wound closed, but a sinus formed later and

bile discharged freely for some weeks, then closed again. She made ultimate recovery. I follow the rule of giving oil. I gave my last three patients half a pint at once. I had an old lady patient who had severe gallstone colic, but absolutely refused operation when it was proposed by Dr. Mansperger. I then ordered her to take one pint of olive oil at once, which she did. Next morning there was a large mass passed by the bowels, whether gallstones or not, I do not know. She had no more trouble for two years.

Dr. THOMAS BAGLEY.—I had a patient in whom all the symptoms were referred to the stomach. She could not digest a bit of food. I took her to a specialist, but he was not positive. A second specialist applied the x-rays, but discovered no gallstones. Dr. Park then was asked to see her and he made a diagnosis of gallstones. He operated and found several good sized ones. The patient since then has been much better. The great majority of cases occur in women. Dr. Kehr, of Germany, gives the death rate of 6 per cent. Statistics, which I have been able to collect, give but one death in 126 cases.

Dr. JAMES E. KING.—There is a difference in the number of cases occurring in male and female as 15 women to 6 men. Gallstones are found with frequency at autopsies without diagnosis having been made during life. In the case of a patient of Dr. J. H. Potter, we operated for uterine fibroid, and finding also gallstones we removed the gallbladder. The proper treatment is surgical. The percentage of deaths is extremely low and is generally due to complications. In simple cases the prognosis is very good. In Dr. Daggett's own person there was severe pain for four months, which was only relieved by morphine. The tissue surrounding gallbladder was friable and the pancreas was somewhat hardened. Gallstones gave him very little trouble, but he was in a bad general condition, having suffered so long that he was hardly expected to recover, and yet his suffering demanded operation. A physician recently had a case at a hospital in which a diagnosis of floating kidney was made. Incision was made through peritoneum and a mass found within which were gallstones in the bladder. Many such cases prompted Dr. A. A. Jones to present his paper on mistakes in diagnosis.

Dr. J. H. POTTER.—I have had two gallstone cases within the last five or six weeks. In the case Dr. King operated for me, there were no symptoms until gallstones were found by operation for fibroid. The other case had unusual features. The woman had an attack of colic a year and a half ago, a few months later a second attack, and another attack a month ago. Pain continued and a tumor developed which increased rapidly in twenty-four hours. Dr. Eugene A. Smith operated and found adhesions, making it difficult to discover the gallbladder. This was due to the inflammatory condition. One stone was found which blocked up

the cystic duct. This was opened and drained. The patient recovered. When one is positive of diagnosis, surgical intervention is advisable.

Dr. T. H. MCKEE.—Gallstone conditions are very similar to those obtaining in appendicitis, and the indications for early operation when the diagnosis can be established are the same; early operations being comparatively safe, while later ones are notoriously uncertain. Personally, I am very seldom called upon to treat a stomach *per se*, almost invariably finding trouble in the appendix, gallbladder or some other organ, when the patient refers his distress to the stomach. I believe it to be one of the most tolerant and long suffering organs in the body and needs about the least attention.

I have succeeded in spoiling two or three cases from an operator's point of view by giving large and frequent doses of olive oil. Symptoms were relieved and they have not recurred. At present the patron of this club is doing more than any one else to popularise the radical operation for gallstones, that is, total extirpation of the gallbladder. The procedure is entirely rational and yields results that are all that could be desired in appropriate cases.

Dr. JAMES A. GIBSON.—A very interesting part of Dr. Dignen's paper was the account of the case he reported. One rarely finds a typical case. Primary disease of the stomach is not, I believe, so frequently met with as is thought. Symptoms referred to the stomach are often due to appendicitis. The treatment by olive oil often works well. A physician in this city always takes a swallow of it after each meal to prevent a recurring attack, having had but one so far. Pain is generally developed within the thickened wall of the gallbladder. It may be referred to the gallbladder or elsewhere.

Dr. DIGNEN (closing the discussion). With regard to olive oil, its use is of doubtful benefit. I have had half a dozen patients in my short experience in medicine and have tried all methods of treatment. Most benefit was attained in my hands from the saline treatment. I had one patient weighing 200 pounds. Stones were found in washing the stools. She had taken quantities of olive oil, nevertheless she had colic once or twice a week. She dreads operation. Oil did her no good at all. I never gave her as much as a pint at a time, but three or four ounces a day. The effect of oil is uncertain. It is doubtful whether it ever gets into the gallbladder. Its acts by increasing peristalsis in the gallbladder wall itself. The really beneficial treatment, once diagnosis is established, is surgical intervention.

ANTIRHEUMATIC PRESCRIPTION.

Kali iodid	1½ oz.
Kali acetat	1 oz.
Tongaline, q. s. ad.	6 ozs.

M. Sig.—A teaspoonful three times a day.

ABSTRACTS.

Levulose in the Dietetics of Childhood.

FUERST, sanitary councillor of Berlin, in a paper on the importance of levulose in the dietetics of childhood (*Zeitschrift f. diät. and physik. Therapie*, Feb. 1, 1903.) says that this pure carbohydrate of Schering has many advantages for pediatric use. It is peculiarly suited for dietetic purposes, and its value as a remedy for chemical disturbance of nutrition has not by any means been adequately appreciated. This is the more remarkable because its usefulness as a food for diabetics has been testified to by Ebstein, von Leyden, von Hebra, H. Strauss, Fr. Voit and other authorities. Ordinary cane sugar is very apt to cause dyspepsia or intestinal fermentation in nurslings; and in powder form is very apt to be adulterated. Milk sugar is not sweet enough in small amounts; in large amounts it causes diarrhea; nor can its purity be relied upon.

Levulose is a carbohydrate that has most important advantages as a sweetener of infant's food. Its molecular form and caloric value is similar to that of milk sugar; and the agreeable taste that it gives the milk renders it most suitable. Even when used for months at a time it never causes gastric or intestinal disturbance, and it is very rapidly assimilated.

Fuerst gave levulose in 17 dispensary cases, all belonging to the poorer class and with unfavorable surroundings. Three suffered from general scrofulosis (glandular), without any signs of tuberculosis; three were probably tubercular and had chronic bronchitis and bronchiolitis after influenza, measles, and pertussis and were greatly emaciated; two had anemia; and one could not recover from a severe bronchopneumonia. In all of them, as in the children not suffering from a definite disease, the dietetic-hygienic conditions were as far as possible regulated; and in all of them several weeks of levulose treatment caused visible improvement and increase in weight.

The author divides the cases in which he used the remedy into three classes and analyses its action in each of them. They are: (1) infants fed chiefly on cow's milk and suffering from malnutrition; (2) children over 2 years old suffering from insufficient nutrition, and (3) sick or convalescent children. Fuerst is not certain whether alimentary tuberculosis due to infection through the milk does occur; but there is always the possibility of bacterial invasion from the intestines. The extremely ready assimilation of levulose, however, gives a means of combatting

infections of the mesenteric glands of this nature. In general in children predisposed to tuberculosis, levulose in combination with an appropriate diet will do a great deal; and it will not be less efficient because it is a simple, nonartificial and natural dietetic agent.

Collargolum and Unguentum Credé in Gonorrhea and its Sequelae.

KORNFELD, Vienna, in his recently published brochure, *Gonorrhea and Matrimony*, (Franz Deuticke, Vienna and Leipsic, 1904,) recommends collargolum, unguentum Credé and itrol for the chronic follicular inflammations of the glandular structures around the urethral orifice. They have done him good service in the indurations of the frenum that these affections so frequently leave behind; and in periurethral nodosities and bands, when not too old.

The author is a decided opponent of the use of ice in the acute stage of unilateral or bilateral epididymitis. It quiets the patient momentarily, but its effects upon the resultant induration of the gland are bad, and even a purely expectant treatment is preferable. When the acute symptoms have subsided especially, unguentum Credé has been found very valuable. It promptly and efficiently promotes the resorption of the inflammatory exudation. Satisfactory results are seen from collargolum instillations and injections ($\frac{1}{4}$ per cent. to 1 per cent.) in very recalcitrant gonorrheas, the cause of whose persistency is the involvement of the prostate in the creeping inflammatory process.

Unguentum Credé, thinly spread on linen, is applied two or three times daily and covered with a moist dressing, which aids its absorption. This is of the greatest value for preventing induration, distortion or obliteration of the vas deferens and for preserving virility. The silver salve plays a prominent role in the therapy of other gonorrheal complications and residual processes, as in acute and chronic prostatitis, in the form of suppositories containing $\frac{3}{4}$ to $2\frac{1}{4}$ grains of collargolum or 4 grains of unguentum Credé.

Kornfeld lays special stress upon the use of these remedies in female gonorrhea. Especially unguentum Credé has proved to be an admirable absorbefacient and disinfectant for puerperal exudates, and in puerperal sepsis. When employed either externally as an inunction or by enema, the results from its use have been nothing less than brilliant. In the gonorrheal affections of women uterine lavage and vaginal and cervical tamponades with

these remedies have a most excellent germicide and desiccant effect, as Kornfeld's own abundant experience proves. He deems it his duty to call attention to the eminent efficacy of the *globule vaginales* made of unguentum Credé in promoting the energetic absorption of painful pelvic exudates.

As regards systemic infection with the gonorrheal virus, gonococcopenia, the author obtained surprisingly good results from collargolum enemata in three personal cases, which in spite of desperate symptoms resulted in complete recovery. The author emphasises the importance of the silver salts and of collargolum in these affections, and calls them sovereign therapeutic agents. Even in true uterine gonorrhea permanent collargolum irrigation for two to four days is of the greatest value.

Betul-ol versus Salicylate of Methyl.

By GUSTAVE FOULLON, New York.

WHILE it would be absurd to contest the therapeutic value of the synthetical salicylate of methyl, yet it cannot be denied that actual experiment with the natural product derived from the "betula lenta" gives much better physiologic results, although even this may cause slight irritation of the skin.¹ Synthetic methyl salicylate has a variable specific gravity (1.183 to 1.190), whereas methyl salicylate as true betula lenta oil, is 1.180 at 15° C. The artificial product of commerce always contains toxic homologous esters, owing to the presence of impurities in the salicylic acid from which it is made (which in turn is derived synthetically from carbolic acid), and while it may not be actually impossible to purify such commercial methyl salicylate of these poisonous constituents, the cost of so doing, would be much greater than the harmless product of the sweet birch (*betula lenta*).

Natural methyl salicylate occurs in the volatile oils of wintergreen and sweet birch, both of which differ in certain respects from the synthetic product obtained by the condensation of methyl alcohol and salicylic acid. True oil of wintergreen contains about 90 per cent. of the methyl ester of salicylic acid, together with small quantities of a paraffin (m. p. 65.5° C.), an aldehyde, an alcohol, and an ester which, upon saponification, breaks up into the same alcohol and an acid. The oil from *betula lenta* is more than 99 per cent. of methyl salicylate, together with traces of the same paraffin and an ester. It is noteworthy that methyl salicylate does not preëxist as such in the plant, but is liberated by the action of a ferment (betulase) upon a glucoside (gaultherin).

1. Vidal. *Pharm. Journ.*, London, 1897, p. 459.

the result of the hydrolysis which takes place being represented as follows:



Dr. Van Romburgh of the botanical garden at Buitenzorg, Java, has recently furnished additional proof of the wide distribution of methyl salicylate in the vegetable world. Of 900 various plants examined for volatile constituents, 160 or 18 per cent. rendered a distillate containing more or less of this ester. The absorption of the salicylate of methyl by the skin, was first indicated by the French physicians Lannois and Linossier. The ester is saponified in the blood, and the salicylic acid is eliminated in the urine in the form of sodium salicylate.

Betul-ol is a compound methyl-oleo-salicylate containing menthol. It has many advantages over the artificial and natural methyl salicylate in treating the symptom pain arising from rheumatism, neuralgia, sciatica or in fact from any cause. It is very rapidly absorbed, affording almost instant relief without reddening the skin or producing irritation. Its anodyne and antiseptic action takes place, moreover, even if the betul-ol is not applied over the seat of the pain, because this salicylic compound, when taken up through the circulation, on coming in contact with any lesion, finds itself in the presence of an excess of carbonic acid which liberates salicylic acid at the spot. Hence direct antiseptic results are produced in the tissues, followed by relief from pain. Effete cell tissue and pus are sterilised by the free salicylic acid and its application is followed by slight diuresis and a marked increase of all solid constituents of the urine, especially urea and uric acid. Thus we understand why the salicylates are *antiseptic, eliminative, cholagogic, antithermic and analgesic*, and so useful in rheumatism (acute and chronic), rheumatoid arthritis, muscular rheumatism, lumbago, neuralgia, sciatica, and even in gout and the fulgurating pains of locomotor ataxia.

The counterirritant, penetrating power and local anesthetic properties of betul-ol are indicated in all arthritic, neuralgic and myalgic affections, including arthritis from any cause, but particularly those affecting the superficial nerves, and any form of myalgias, which have always been counted among the most stubborn affections. It has been applied in the treatment of endometritis and its complications, salpingitis, etc., and especially in gonorrheal cervical endometritis (apply by painting the cervix); it also relieves pruritus and lichen simple. Betul-ol in fact is applicable wherever we look for local antirheumatic, antipodagric and antiseptic results. Betul-ol yields on analysis, the same percentage of salicylic acid as salicylate of soda; it contains no mor-

phine or cocaine, but these may be added in prescribing if desired; it is soluble in all proportions of ether, alcohol, chloroform or oils, and may be used either pure or in combination as a liniment.

Betul-ol is for *external* use only; but colchi-sal capsules *internally*, are essential to the treatment, *where there is a mixed rheumatic and gouty tendency*. Quite small amounts of betul-ol suffice to give relief, as each minim absorbed produces an equivalent of one grain of nascent salicylic acid. To facilitate the absorption of betul-ol, the affected surface should first be washed with soap and water to dispose of the excess of fat normally found in the skin. Apply with the camel-hair brush if the affected parts be very tender; gentle friction, however, is recommended where it can be borne. To insure proper absorption after application, the part should be covered with a soft impermeable tissue (gelatino-silk tissue is the best) and afterward enveloped in cotton wool to maintain the temperature.

Dysmenorrhea, with Special Reference to Treatment.

SIMMS, Racine, Wis., (*Medical Herald*), says the clinical diagnosis of dysmenorrhea is in itself easy enough, while the cause is not always so easy to explain. In the cases presented especial attention was paid to the causation of the menstrual pain, as I believe that in this manner I was better able to outline the indications for treatment. It goes without saying that dysmenorrhea from mechanical obstruction is not amenable to medical treatment. Fortunately, however, it has not been as frequent, in my experience, as dysmenorrhea depending upon congestion. The specially disagreeable and intractable form of dysmenorrhea which is accompanied by a fetid discharge as a result of the decomposition of the retained menstrual blood, also comes under discussion here, as the use of douches with antiseptics and deodorants cannot be hoped to affect it permanently, while the employment of more radical medicinal means does bring about the desired effect in this condition.

In congestive dysmenorrhea, and in that form which is accompanied by fetid discharge, the indications are to diminish congestion, by promoting the contractions of the uterus and relieving it of the accumulated blood, to stimulate glandular activity in the mucosa, to restore the tone of the uterus and the nutrition of its tissues to normal, and to relieve spasm and pain.

The following cases illustrate the effects which I obtained with the use of ergopioid (Smith) in the treatment of dysmenorrhea:

Some months ago I was consulted by a young woman who had suffered from scanty, fetid menstruation, accompanied by a

great deal of pain, since the birth of her first child seven years previously. Her labor had been followed by a tear of the perineum which had been left unrepaired, and also a laceration of the cervix uteri. This patient consulted a specialist, but his treatment did not give her relief. Examination revealed the presence of the uterine and perineal lacerations already mentioned, and disclosed a chronic endometritis that had given rise to a fetid discharge and to pain during each menstrual period. I repaired the tears, curetted the uterus, and hoped in this manner to obtain permanent relief of the patient's symptoms. After she had recovered from the operations, she declared that she was feeling better than she had been for years. But very soon the fetid discharge and the pain returned at each menstrual period, and evidently something else had to be done if I wanted to save my reputation. I then tried local applications, alteratives, uterine tonics, etc., all without avail, until finally ergoapiol was given. The result was immediate relief and a gradual and permanent improvement in the menstrual flow until it was free from pain and devoid of any disagreeable odor.

Another type of dysmenorrhea, that which I term "nervous," but which the authorities term "neuralgic," is illustrated by the following case which recently came under my care:

The patient was a young woman who had been married two years, but had not borne any children. She stated that she had pain during the menstrual period from the first onset of menses, and at the time of examination she also complained of a fetid discharge. The menstrual flow was scanty and rarely of blood red color. Just before and after the period she had backache and headache, her complexion was unhealthy, not bright and clear as that of her sister, and she appeared older than she really was. She always dreaded the onset of the menses which recurred with a regularity that is not always present in these cases. She was easily excited, and received impressions vividly and indelibly. Her digestion was poor, and she was often sleepless, irritable, and peevish.

Vaginal examination revealed a slightly thickened os with slight endocervicitis and erosions of the cervix. Cod liver oil, malt extract, hypophosphites, and aromatics, in combination, 25 per cent. of each, were given freely during the intervals between the menstrual periods and for three days before the expected menstruation ergoapiol was given in capsules, one being given three times daily until the discharge ceased. At the fourth period after the beginning of the treatment she was relieved of all her symptoms, and was free from pain and fetor during menstruation. Locally, tincture of iodine and occasionally tampons of ichthyol and glycerine were applied. The cure was permanent and in every way satisfactory.

TOPICS OF PUBLIC INTEREST.

Status of Osteopathy.

[From *Saint Louis Clinique*, Editorial, March, 1904.]

A GLANCE at the medical laws recently adopted, or introduced in the legislatures of several states, shows that there is a strong tendency on the part of legislatures to make changes in the medical laws looking to a better recognition of all the side issues of the practice of medicine. This is especially marked when we take up the subject of osteopathy. In many states this cult is dignified as a system of practice, and while it has certain limitations it still holds a position before the law equally as high as does the practice by the physician who has devoted a lifetime to the study of his profession, and who, in addition to the knowledge acquired by the osteopath, is master of the entire field of medical science. It is a disposition to make a part, and a very small part at that, equal to the whole.

This tendency on the part of legislatures is due to two principal causes: first, to the utter apathy of the medical profession and the want of organised effort on behalf of sound medical laws; second, to the aggressive character of the promoters of this special brand of sectarianism.

From the Report of the Illinois State Board of Health for 1903, we quote the following: "osteopathy (osteon—a bone, pathos, suffering). 'a system, method or science of treating diseases of the human body,' is legalised and its practice is regulated by legislative enactments in the following states—Arizona, Arkansas, California, Connecticut, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Vermont, Virginia, and Wisconsin. In Massachusetts and Texas osteopaths are exempt from the provisions of the medical law of the state." In Illinois bills have been passed by the two last legislatures legalising osteopathy in the state, but these have been vetoed by the governor in each case,—the first by Governor Tanner in 1897; and the last by Governor Yates in 1903.

Quoting again from the Report of the Illinois State Board of Health we see that "under the provisions of the medical law of Illinois enacted in 1899, the State Board of Health is empowered to examine and license persons who desire to practise any certain 'system or science of treating human ailments, who do not use medicine internally or externally and who do not practise operative surgery,' the said examination to 'be of a character sufficiently strict to test their qualifications as practitioners.'"

This would appear to be a fair law. It does not prohibit the practice of osteopathy or any other method of healing the sick. It only asks that persons who assume to do this shall show that

they possess certain qualifications. It does not ask of the osteopath as much as it does of the one who makes use of all the therapeutics known to the science of medicine. In spite of this very liberal law we shall see a bill introduced in the next legislature which will seek to relieve the osteopath of even this examination, or to establish a separate board of examiners for them.

The whole matter will resolve itself into this one fact; a certain class of men are determined to get all the rights and privileges of the doctor without the necessity of earning those privileges by a thorough and systematic study of the science of medicine. A bill is being pushed in the Kentucky legislature providing for a special board of examiners for osteopaths, and the whole strength of that power will be used to secure its passage.

The medical profession should not be indifferent to this matter, not because the results will be particularly disastrous to it, but for the better reason that the medical profession is better qualified to judge what is best for the public. The medical profession has ever been the most earnest advocate of measures for the relief and prevention of disease, and should not now be willing to permit unqualified persons to become the guardians of this particular part of the public interests. The profession of medicine is too liberal to attempt to persecute any sect in medicine,—a charge frequently brought up when steps are taken looking to the betterment of the condition of those who are unable to judge for themselves in matters affecting health,—but it should take such steps as are necessary to secure legislation which will prevent unscrupulous persons from imposing upon the ignorant, and especially should it be seen that no person is permitted to practise medicine under the cloak of osteopathy or any other so-called science except according to fixed standards.

Recent Progress in Matters Pertaining to the Care of the Insane in the State of New York.

SOME of the measures of improvement in the care of the insane of the State of New York carried through during the past few months by the Lunacy Commission and formulated by that commission are stated in the following terms:

1. The Pathological Institute has been reorganised and more than sixty of the medical men connected with the staffs of the fourteen state hospitals have been instructed recently at the institute on Ward's Island in the later development of psychiatry along clinical, pathological, psychological and clinical lines. The legislative appropriation for the institute is now \$25,000 annually.

2. The hospitals have been opened to medical internes in the same manner as general hospitals. Year before last sixteen clinical assistants entered the service in this way, and last year the number was about thirty.

3. The legislature recently passed the lunacy commission's bill for the appointment of a medical inspector to insure a more thorough inspection of the thirty-nine institutions under its charge—namely, 23 private retreats, 2 criminal asylums, and 14 state hospitals for the insane. Such inspection, especially of the private asylums, in which there are about 1,000 patients, has never been adequate.

4. To remedy overcrowding the lunacy commission proposes to construct a new hospital in the territory north of Albany and Troy on the colony system. A scheme similar to that of the Craig Colony for epileptics will be carried out. The site will be selected and plans made this year. This colony for 1,500 to 2,000 patients should be ready inside of two or three years.

5. Three tuberculosis hospitals, each with a hundred beds were put under construction last summer at a cost of \$90,000, located at Middletown, Utica and Binghamton on the grounds of the state hospitals at those points; and the plans made by Dr. Peterson and the state architect embody the main features of such hospitals described in the King Edward Prize Essays. In the meantime tent life for the tuberculous insane has been in vogue at the Manhattan State Hospital, East (under Dr. MacDonald), for two or three years, and for a shorter time at Binghamton and other of the state hospitals.

6. The country colony for a few of the working classes of the insane, as an offshoot of the Utica State Hospital, has been enlarged. A similar colony has been established at the Willard State Hospital and two are in existence at the state hospitals at Binghamton and Poughkeepsie.

7. A new departure last year was the creation of a summer camp for between 40 and 60 insane on the lake shore about 15 miles from the Rochester State Hospital, which was put in operation to the great delight of both patients and attendants.

8. The feature of nurses' homes having been found so useful at some of the hospitals two additional ones were put up last summer, one at Kings Park State Hospital, Long Island, for 300, and one at the Gowanda State Hospital for 100 nurses.

9. Six or seven residences for superintendents and separate houses for the medical staffs were put up last season at as many of the state hospitals, thus removing the officials from the central main buildings and utilising the vacated space for patients.

10. A bill providing for emergency commitments, recommended by the lunacy commission, was passed by the legislature a year ago. Copies of this law have been sent to all the examiners in lunacy of the state. It is believed that this will mean great good to the insane and prevent the all too frequent incarceration of urgent cases in jails and station houses.

11. The improved ration brought about during the past year, though entailing an additional cost to the state of a hundred thousand dollars a year or more, has added greatly to the comfort

of the patients and to the satisfaction of the medical officials and various visiting boards.

12. A strong effort is making by the lunacy commission to increase the number of deportations of alien insane, and through the efforts of New York State the federal government passed a law making the limit three years instead of one; that is, an immigrant becoming insane within three years after landing in the United States may be returned to his own country.

13. The movement for the establishment of reception hospitals for acute curable cases in the large cities has gained strength. While the bill for the psychopathic hospital for New York city, which was to be the first of several such reception hospitals, failed to pass last year, it is expected that success will attend the commission's efforts during the present session.

For these and still other reasons the commission in lunacy is confident of much improvement in the care of the insane in the very near future. It is proper to add that many of the changes alluded to in the foregoing statement have become accomplished facts, since the issuance of this circular several months ago.

The Antitoxin Treatment and its Manufacture.¹

Editor Buffalo Medical Journal:

SIR—Upon the subject of the early antitoxin treatment of diphtheria your views doubtless coincide with those of the leading teachers of medicine in this country and Great Britain; and, since you are familiar with the latest literature, we venture to act on the repeated suggestion of our medical advisers and ask your assistance in disseminating certain truths which are unassailably sound and correct, but which have by no means the vogue that they deserve.

McCollom, of Boston, (*Boston Medical and Surgical Journal*, Dec. 25, 1900,) expressed the opinion three years ago that "small doses are of little avail in the treatment of grave types of the disease;" that "in order to obtain the best results the serum must be heroically administered." The same writer states that heart complications of a serious nature have not been so frequent among the thousands of patients treated in a Boston hospital, nor has paralysis been so prominent. Finally, "since the larger doses of antitoxin have been given, the death rate has been materially reduced; the reduction having occurred among the apparently moribund cases."

1. NOTE BY THE EDITOR.—So much of interest attaches to the antitoxin treatment at the present time, and again so much controversy is taking place just now, we prefer to let expert and reliable manufacturers speak for themselves in relation to these questions. The communication of Messrs. Parke, Davis & Co. is so clear and intelligent that we are pleased to present it under "Topics of Public Interest," rather than under "Correspondence."

The *British Medical Journal* some time since, (Nov. 10, 1900,) advised the injection of 2,000 UNITS IN MILD CASES, and 4,000 to 10,000 units in cases not mild,—that is “if either of the tonsils is entirely covered with thick membrane, or the palate, the nasal passages, or larynx is attacked, or if there be enlargement of glands, fetor, increased frequency of pulse, albuminuria, pyrexia and restlessness.” In “bad” cases, 16,000 to 20,000 units in 24 hours will be required.

Immunisation.—J. Dutton Steele, M. D., of the University of Pennsylvania, (*Therapeutic Gazette*, July 15, 1901,) cites 17,516 immunised cases collected by Biggs, of which only 129 developed mild diphtheria in thirty days: twenty patients were attacked after thirty days; and in all THERE WERE BUT TWO DEATHS.

There seems to be a variety of opinion as to the duration of the artificial immunity thus induced, but at all events the tendency is unquestionably in the direction of large doses. As the author just quoted says: The dose (immunising) which was originally placed at 200 to 500 units has advanced so that now from 500 to 1,000 units are more frequently given.” It is a well-known fact that the Klebs-Löffler bacillus may be and has been repeatedly found in the throats of immunised nurses and others exposed to diphtheria, without the appearance of clinical symptoms of the disease.

Stamping out Epidemics.—In order to check the spread of diphtheria in any densely populated community, two measures are essential—namely, isolation, and immunisation by the injection of 1,000 units of antidiphtheritic serum. Inasmuch as the micro-organisms have been found in the throats of convalescents for two weeks after recovery, there is always a possibility that their virulence may survive the period of immunity conferred by a small prophylactic dose of serum. Hence, the great importance of using a sufficient amount of this harmless agent whenever necessary to employ it as a preventive measure. There is every reason to believe that the initial immunising dose for a child under ten years should be at least 1,000 units, and when the patient's environment subjects him to repeated exposure the injections should be given at intervals of not less than three weeks.

Municipalities as Manufacturers.—There is another aspect of this subject that is worthy of the thoughtful consideration of the medical editor, teacher and practitioner. Recent agitation by the newspapers has prompted the health officers of some cities to venture to undertake the manufacture of antitoxin. That this is a dangerous procedure has been demonstrated, notably in the case of the city of Saint Louis. A safe antitoxin cannot be made successfully except under the most favorable conditions. The

essential details of a delicate scientific process cannot be entrusted to stable boys or unskilled laborers. Only perfectly sound animals can be utilised. They must be housed in large, airy, well-lighted and drained buildings, equipped with aseptic fittings. They must be cared for with scrupulous fidelity to the principles of hygiene, and must be under the constant care of trained veterinarians. The appointments of the laboratories must be perfect. The appliances must be absolutely sterile during the entire process. This involves a vast outlay of capital and the employment of high-salaried and thoroughly trained men. Our own equipment, including our great twin stables, represents an outlay of nearly half a million dollars.

Federal Supervision.—The United States Government recognises the importance of a perfect equipment for this work, and now, after a thorough inspection by the Bureau of Public Health and Marine Hospital Service, issues a license to those manufacturers who can comply with its rigid requirements. It is needless to say that municipal laboratories, not being engaged in interstate commerce, do not come under the jurisdiction of United States laws, and therefore do not have the benefit of rigid government inspection,—an inspection so severe that, rather than undergo the expense necessary to comply with the requirements of the United States Government, a number of small concerns have withdrawn from the industry.

Apropos of the subject of the present method of classifying serum under one grade, you may be interested in the remarks of Dr. B. R. Shurly, of Detroit, which appeared in a recent issue of *Pediatrics*. The writer says:

A fatal error has frequently come under my observation, that of mistaking the meaning of the classification, double X serum. Double X serum refers to twice the bulk or concentration of the product, but no increase in antitoxic value. In other words, 2,000 units single X are identical in curative value with 2,000 units double X. The majority of physicians who have used antitoxin occasionally fall into the serious and fatal error of believing one to be twice the value of the other. It would seem necessary to request the laboratories manufacturing antitoxin to make the directions and title of the product so clear that no possible confusion can arise. Under the present system the mistake is leading to fatal results.

We submit these facts because they are of more than ordinary interest just now. We trust you will find them worthy of serving as the theme of a timely editorial in an early issue of your periodical.

PARKE, DAVIS & Co.

Detroit, February, 1904.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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No. 9.

An Army Medical Reserve Corps.

AT LAST, and in all probability in response to the very general demand for reform on the part of the medical press of this country, a bill has been prepared and introduced in congress, providing for the recognition of the civilian surgeon in regular army life. The agitation for reform in this direction was begun during the Spanish war, when the necessity for additional medical officers required the employment of a large number of physicians from civil life who were known as acting assistant surgeons, with the relative rank and pay of a first lieutenant and assistant surgeon in the medical department.

These men were by special order allowed to wear the uniform of the United States army with the exception that their shoulder straps and collar ornaments were of silver instead of gold, as worn by the regularly commissioned surgeon. They were allowed quarters, but nothing else; they were not entitled to pension in the event of injury on the battle field; they were considered as contract employes, and, in fact, the term contract surgeon was more often applied to them in unofficial designation than that of acting assistant surgeon, as they were termed in official correspondence. They were merely attached and had no standing whatever, except that given them by Surgeon-General Sternberg, whose request to the Adjutant General that an order be issued requiring obedience to the orders of the acting assistant surgeon, was complied with and his position as a semi-attached officer was established. The enlisted man understood thoroughly the position of the civilian surgeon and while he recognised his worth and his ability, yet he was not a commissioned officer, and that in the eyes of the soldier made a great difference in his standing, officially and socially, even to a large number of commanding officers.

After the Spanish War, when surgeons were needed in the Philippines, the designation was changed from acting assistant surgeon to that of contract surgeon. This added indignity was placed upon the civilian surgeon with a cold-blooded deliberateness, which was chilling to say the least. They were stripped of their imitation uniform; they were not allowed any of the rights and privileges the acting assistant surgeon was supposed to have enjoyed. They were made to feel that they were simply temporary conveniences, and the climax was reached when the second auditor of the treasury, an office which has for years been considered by the army man as the headquarters of official assininity, issued a decision that the contract surgeon was merely a civilian employe under contract, the same as a teamster, for instance, and as such enlisted men and nurses and hospital corps men need not obey his orders. To the credit of the men of the hospital corps and the stewards under whose direction they work, there has not been reported a single instance where the orders of a contract surgeon have been disobeyed in spite of this interpretation from the treasury department.

These successive moves, made in opposition to the wishes of the surgeon general it is understood, nearly ruined the chances of the United States Army of securing competent medical officers in case of necessity. Certainly no self-respecting surgeon would take service under such circumstances. The bill which has been introduced in congress and which is urged by Surgeon-General O'Reilly, places the civilian surgeon on an equal footing with the regular army surgeon during the time he is in service. It provides for the formation of a medical reserve corps the members of which shall be commissioned as first lieutenants and assistant surgeons; they will have all the privileges of the regular army officer, except that of promotion. They have been accorded even the increase of pay which goes with long service. Contract surgeons now in the service and acting assistant surgeons of the Spanish war who made good records may be commissioned on recommendation of the surgeon general; all others who enter will have to pass an examination as to fitness. No officer of the reserve corps will be entitled to retirement or retirement pay, but he will be entitled to pension when physical disability is incurred while on active service and in line of duty. The bill is one of the most important which has been presented in connection with the medical department of the army in years, and will insure for the service prompt and competent medical equipment in case of war.

A commission in the proposed reserve corps will give the officer the privileges of the Army Medical School at Washington,

and the surgeon general of the army will probably arrange for the instruction of the new officers in the complicated paper and executive work of the service, lack of knowledge of which on the part of the acting assistant surgeon who was so unfortunate as not to have the advice of a seasoned hospital steward, resulted in great property loss to the government, and an almost endless muddling of official papers and reports.

Paper Money and Disease.

IN ITS March edition the JOURNAL referred to the bill before congress to establish post check currency, and suggested that it receive the support of physicians because it is in the interest of preventive medicine. Our contemporary, that stalwart newspaper the *Buffalo Evening News*, in its issue of March 10, 1904, commented as follows:

FOR CLEAN MONEY.

The BUFFALO MEDICAL JOURNAL is one of the most ably edited publications of its class in this country and we are glad to see that it is taking hold of the question of a cleaner currency and thus sustaining the position which the *News* took on this question years ago, and has maintained ever since.

The BUFFALO MEDICAL JOURNAL says:

Clean money is an important desideratum as every physician will attest. Soiled currency is a medium for the transmission of disease; this, too, every physician knows. A remedy is offered in congress through a bill to create post check currency. In other words, it is proposed to create a system of bank notes, payable to the order of the individual named on the face of the bill. This can be sent through the mails, properly indorsed, similarly to personal checks or drafts. It is canceled after one payment made through its medium, hence the danger of transmitting disease is reduced to a minimum. Fractional currency could thus be created which would meet a great demand in the payment of small sums to persons at a distance. This proposition being in the interest of the prevention of disease should receive the approval of every physician.

So far so good, but the MEDICAL JOURNAL does not go far enough. It should advocate the calling in by the United States Government of this truthfully-called filthy lucre in shape of bills that are worn with so much service, carrying microbes around from one state to another and spreading disease and death. Of course, it might be asked by unthinking persons why doctors or the BUFFALO MEDICAL JOURNAL should take up a subject which would help to cut off a source of their revenue. The reply is that doctors have enough to do and always will have without epidemics. It is high time some one at Washington brought

this currency question before Congress and the *BUFFALO MEDICAL JOURNAL* can help to bring this about.

The *News* is quite correct; its point is well taken. It is not sufficient for congress to content itself with passing the post check currency bill, without a clause authorising and requiring the immediate redemption of soiled money. Indeed, we are inclined to favor the practice of the Bank of England, in redeeming every note as fast as paid in, soiled or clean; because, no matter how new a bank-note or how clean it looks, if once used it is sure to become contaminated with disease germs.

In support of this statement we cite a Washington despatch to *The Tribune*, under date of March 14, 1904, which reads:

Representative Gaines, of Tennessee, today laid before the House Committee on Banking and Currency a letter from Dr. Thomas Darlington, Health Commissioner of New York, giving the result of his investigation of coin and paper money to determine the extent it may be a conveyer of disease germs.

Bacteria, according to the report, will not live longer than forty-eight hours on silver, nickel and copper coins. Two dirty bills were washed and one was found to contain 135,000 bacteria, the other 126,000. Two comparatively new bills contained respectively 2,250 and 2,000 germs. The report says: "Upon all were found staphylococci, proving that money may carry disease."

We are indebted to the *Buffalo Evening News*, both for its complimentary reference to the *JOURNAL* and for pointing out the importance of canceling soiled paper money. We did not enter upon a discussion of this phase of the subject in the paragraph quoted by the *News*, because we thought it better to heat one iron at a time, but on reflection, we think the post check currency bill should contain the redemption clause referred to and we will gladly second the efforts of the *News*, so ably made for several years, toward the end sought.

Venereal Disease and the Canteen.

CONSIDERABLE comment has been caused by the publication of a monograph by Mr. A. C. Proffitt, concerning the British army, entitled, "Army inefficiency: It's greatest cause." The monograph deals with venereal disease as the principal reason for army inefficiency and, although the subject is an old one in so far as medical journals are concerned, Mr. Proffitt puts the entire subject in rather a new and startling light when he says that venereal diseases are responsible for one-third of the admissions to hospital. With the abolition of the contagious diseases

act, the diseases in the British service increased at least 50 per cent., and *American Medicine* is authority for the statement that the increase in the American army since the abolition of the canteen is "enormous." This is quite true. And an additional fact which has apparently escaped observation is that not all of the cases of venereal disease are reported to the surgeon at an army post, for the simple reason that the enlisted man does not get credit for illness due to venereal disease. In other words it counts against him. The disability may be considered avoidable by those solicitous creatures who have taken such an active part in the abolition of the canteen with a view to the soldier's moral salvation, but it is a disability nevertheless, and because it does count against the soldier he prefers to go to a quack for treatment or to treat himself with the prescription of some druggist. Probably not more than one-fourth of the venereal disease in the army is ever reported to the surgeon, hence it is that the true figures cannot be shown in the reports of the surgeon general's office.

It is wrong to consider a soldier blameworthy because he contracts a venereal disease. He doesn't contract it wilfully any more than he deliberately contracts typhoid or any other communicable, or infectious, or contagious disease. When a man is ill he is entitled to treatment irrespective of how he contracted his illness. When the purists have closed up all the houses of ill-fame and driven their inmates broadcast throughout the cities, into furnished rooms and the back rooms of saloons, with army post canteens closed, the hymn of victory of virtue over vice is drowned in an outburst of complaint over the remarkable increase in venereal disease. The closing of the canteen was worse than a mistake; it was the kneeling of official servility before the smug-faced mask of hypocritical virtue.

Dinner to Dr. Pryor.

DR. JOHN H. PRYOR, of Buffalo, who has been appointed superintendent of the New York State Hospital for the treatment of patients suffering from incipient tuberculosis, located at Raybrook, Essex county, in the Adirondack region, was tendered a dinner by a group of his friends who are members of the Saturn Club. The banquet was served at the club on the evening of March 17, 1904, and was presided over by Dr. Stephen Y. Howell. Besides Dr. Pryor, who was the guest of honor, the following-named gentlemen were present: J. N. Adam, Francis Almy, Frederick Almy, Louis L. Babcock, John H. Bell, Walter L. Brown, Dr. L. Burrows, Clarence W. Cady, Newcomb Carl-

ton, Martin Clark, Edward W. Dann, Jesse C. Dann, William A. Douglas, Joseph G. Dudley, W. Allen Gardner, Edward B. Guthrie, H. S. Guthrie, Dr. H. E. Hayd, George Harrower, Charles B. Hill, Dr. Stephen Y. Howell, Dr. Arthur W. Hurd, William B. Hull, Dr. Charles S. Jewett, Dr. F. Park Lewis, Shumway Lee, Frank M. Loomis, Dr. H. G. Matzinger, H. G. Meadows, Knowlton Mixer, Austin K. Muzzey, John A. Mann, John B. Olmstead, Dr. Roswell Park, Dr. John Parmenter, Dr. James W. Putnam, R. W. Pomeroy, Dr. W. S. Renner, Dr. DeLancey Rochester, Harry Rumrill, John Sedgwick, Henry W. Sprague, Dr. P. W. Van Peyma, Frederick A. Vogt, H. C. Wadsworth, General S. M. Welch, Dr. Ernest Wende, Ansley Wilcox, Arthur H. Williams, Harry D. Williams, Dr. H. U. Williams, John L. Williams.

A loving cup was presented to Dr. Pryor, John B. Olmstead, Esq., acting as spokesman in behalf of the donors. In the issue of the JOURNAL for March, 1904, the fact was mentioned that Dr. Pryor had passed the state civil service examination, and had become eligible for this appointment. It appears that Dr. Pryor was prevailed upon to accept the appointment by his former associates upon the board of trustees. His superior fitness for the place, manifested during several years work upon the board, was recognised. Dr. W. G. Macdonald, of Albany, one of the trustees, is quoted as voicing the opinion of the board in the following language:

Dr. Pryor is regarded peculiarly as an expert on diseases of the chest. He has so been regarded throughout the country for a number of years. He is the pioneer advocate of state care of incipient tuberculosis, and his experience in developing that idea equips him with special qualifications for this position.

He has been connected for a number of years with the large hospitals of Buffalo, and was instrumental in having the Erie County Hospital provide a department for the care of tubercular patients. The board of trustees regards itself as being peculiarly fortunate in securing the services of Dr. Pryor. The appointment may be characterised as advantageous to the state and it is not without personal sacrifices upon the part of Dr. Pryor. For a number of years he has been associated with propositions which the state has now practically determined to solve, and it could find no better agent nor no more conscientious observer than Dr. Pryor.

While Dr. Pryor's countless friends in Buffalo will regret his departure from the city, all recognise the wisdom of his selection to perform the duties of this important state institution and unite in wishing him the best success.

AMERICAN MEDICINE is making a splendid fight against the medical advertiser in the daily newspapers, and in a recent issue editorially calls attention to the use of the mails by the newspapers containing fraudulent and filthy advertisements. An especially flagrant case of foulness is thus referred to:

The columns of the most popular papers, both of the city and county, are reeking horrors, although they are said to be "family" journals, appearing at the breakfast table for the instruction, not only of the men, but of mother, daughter, and child. And they are allowed the benefits of the United States Mail Service, although fraud and deception are rampant in them and crime is encouraged. Why will any decent person, for example, buy or allow the *New York Sun* of Sunday, February 21, to come into his house? Prominent in its columns is a most nauseating picture advertisement headed: "UNHAPPY HOMES CAUSED BY WEAKNESS IN MEN." Even in a medical journal we hesitate to repeat the disgusting parts of the advertisement about the "shrunken organs," etc., and copy only the last paragraph, which runs as follows:

The lucky discoverer simply desires to get in touch with all men who can make use of such a treatment. They should address him in confidence, Dr. H. C. Raynor, 339 Luck Building, Detroit, Mich., and immediately on receipt of your name and address, it is his agreement with this paper to send you a free receipt or formula of this modern treatment by which you can cure yourself at home.

Note the words, "his agreement with this paper."

PRIOR to the appointment of the Panama Canal Commission the committee on Medical Legislation of the American Medical Association, Dr. Charles A. L. Reed, of Cincinnati, chairman, urged that one of the members of that commission be a medical man entrusted with the work of sanitation. Attention was called to the frightful mortality on the canal work under French regime, and it was urged that the highest administrative authority be invested in the appointment suggested. The name of Dr. Gorgas, whose brilliant work in Cuba has made for him a lasting reputation, was mentioned later in connection with the appointment. The commission has been announced and there does not appear among the names that of any man whose knowledge of sanitation is more than purely superficial or any deeper than is absolutely necessary to an engineering education. The only remedy is for the army medical department to be placed in control of the medical situation on the Isthmus. Then there will be results just as there were results in Cuba and the Philippines when the army took charge.

A TRAINED nurse, Miss Alt, slipped on the icy sidewalk at Elmwood avenue and North street, Buffalo, Sunday night, February 28, and fractured one of her legs. She was assisted to the steps of a house in front of which a carriage was waiting. A passer-by rang the bell and asked if the carriage might take the suffering woman to her home, a short distance away. Permission was refused, because the residents of the house wanted to go to church in the carriage, and Miss Alt was allowed to sit on the steps in water-soaked clothing without the slightest offer of assistance from the people in the house, which is occupied by the first reader of a christian science church, who swept by Miss Alt without so much as looking at her. That is Eddyism or christian science. Across the street lives Mr. George B. Hayes. His son came from the house to mail a letter; he saw the injured woman and went to her with offers of shelter and assistance. That's humanity. And there is a wide difference between christian science and humanity. One is a selfish, narrow-minded fad, the other is real Christianity.

AN ASSOCIATED press dispatch, dated March 21, 1904, indicates that another step has been taken toward the union of the State Medical Society and Association. It reads as follows: "Tonight the New York State Medical Association went out of existence and, by a resolution unanimously adopted, took the last action necessary to complete the consolidation of the two state medical organizations which have occupied the field in opposition for more than twenty years. The other society whose name will be retained by the new organisation, the Medical Society of the State of New York, has already taken necessary action."

OUR readers are well aware that the JOURNAL rarely speaks of its own affairs in its columns. Recently, however, two compliments from excellent sources have come to our hands as such agreeable surprises that we fain would mention them. One, which is from the *Buffalo Evening News*, is referred to elsewhere. The other reads as follows:

KRESS & OWEN COMPANY,
Manufacturing Chemists,
210 Fulton street, New York,
March 11, 1904.

BUFFALO MEDICAL JOURNAL,
William Warren Potter, M. D., Editor.

Dear Doctor—We desire at this time to express our sentiments of appreciation due your journal. As an advertising me-

dium it has well served its part in the establishing of our product, glycothymoline. How well we have succeeded may be mirrored in the statement of a prominent New York clinician, who recently remarked, "glycothymoline in the treatment of catarrhal conditions of mucous membranes has become as standard as any drug in the pharmacopeia."

Thanking you for any interest in our behalf and wishing a most prosperous season for your JOURNAL, we remain,

Yours very truly,

KRESS & OWEN COMPANY,

SAMUEL OWEN,

President.

Thank you, gentlemen, and please accept our cordial appreciation of your kind words.

PERSONAL.

HON. T. GUILFORD SMITH, of Buffalo, who was a life member of the Board of Regents of the University of the State of New York as formerly constituted, has been elected one of the eleven regents who are to govern the educational system under the new plan. Regent Smith, in the drawing for terms of service, was chosen for eight years.

DR. A. VANDER VEER, of Albany, a member of the former board of regents, has been elected to the new board and drew to serve one year. The interests of the medical profession will not be neglected while Regent Vander Veer continues a member of the board. Dr. Vander Veer has recently been appointed surgeon-in-chief of the Albany hospital. He desired to retire after so many years' service as attending surgeon, but the hospital governors prevailed upon him to accept this new office which was created for him.

DR. LEONARD WOOD, brigadier-general United States army, was recently confirmed by the senate as major general, after a great flourish of opposition lasting some months, the vote standing 45 to 16. General Wood is at present serving in the Philippines, and has well earned this promotion. He has probably been instru-

mental in saving more human lives than any other major general in the army.

DR. HARVEY R. GAYLORD, of Buffalo, who recently spent some months in Europe, has returned and removed to No. 478 Delaware avenue.

DR. ANDREW S. DRAPER, president of the University of Illinois, has been elected by the legislature commissioner of education of the state of New York under the new law. Dr. Draper was formerly superintendent of education and is familiar with the schools and colleges in this state. He assumed the duties of his new office April 1, 1904.

DR. ROSWELL PARK, of Buffalo, sailed for Europe on the Blucher, March 24, and will attend the German Surgical Congress at Berlin, April 4-9, 1904. He expects to be absent about six weeks.

DR. JAMES WRIGHT PUTNAM, of Buffalo, delivered an address, March 17, 1904, at the Twentieth Century Club, to the students of Buffalo Seminary, taking for his subject, Rest, an essential to right and joyous living.

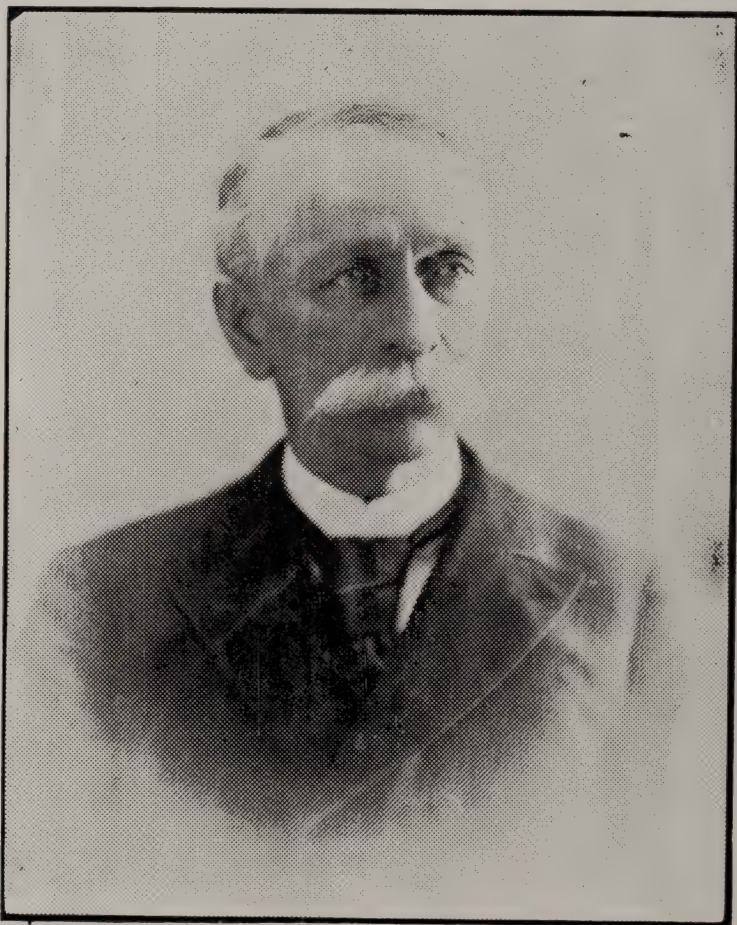
DR. REGER CUTTING, a graduate of the University of Buffalo, 1902, and who afterward served as house surgeon at the Emergency Hospital, has located at Attica, N. Y., for the practice of his profession.

DR. DAVID WHEELER, of Buffalo, has been appointed a member of the staff of the Buffalo Hospital of the Sisters of Charity, vice Dr. Byron H. Daggett, deceased.

DR. FREDERICK PETERSEN, of New York, president of the State Lunacy Commission, has tendered his resignation to the Governor. Dr. Petersen states a cogent reason for his action—namely, that his practice will not permit him to remain longer in a place that demands so much time. When will the commonwealth learn that in order to obtain and retain the services of competent medical officers it must offer adequate remuneration?

OBITUARY.

DR. JUSTIN G. THOMPSON, of Angola, N. Y., died at his home in that village March 6, 1904, aged 66 years. He had been long ill



[From *The Buffalo Illustrated Times*.]

JUSTIN G. THOMPSON, M. D.—1837-1904.

with heart complications consecutive to recurrent attacks of grip and finally died from heart failure.

Dr. Thompson was a native of Chautauqua County, received his preliminary education at Fredonia Academy and graduated in medicine at Ann Arbor, Mich., in 1861. Soon afterward, Sep-

tember 5, 1861, he was commissioned second lieutenant of Company G, 49th N. Y. Infantry. Later in the autumn he suffered an attack of typhoid fever which caused his resignation December 26, 1861. He was commissioned assistant surgeon of the 9th N. Y. Cavalry, August 11, 1862; was appointed assistant surgeon 77th N. Y. Infantry, November 17, 1862, was promoted surgeon of the same regiment December 17th, 1864, and was mustered out with the regiment June 27, 1865. During the campaign in the wilderness he was left in charge of wounded and became a prisoner, remaining on that duty about forty days, after which he returned to his command.

Soon after the war ended Dr. Thompson located at Angola, where he engaged in active professional practice which continued until his last sickness. He took active interest in the affairs of the Grand Army of the Republic and for several years was commander of the post where he lived; also, he was master of the masonic lodge at Angola for a number of years. He was surgeon of the Lake Shore and Michigan Southern railroad for over twenty years, holding the position at the time of his death; and for about twelve years he was pension examining surgeon attached to the Buffalo board. He was a member of several medical societies, among which was the Medical Society of the State of New York, and he had been president of the Medical Society of the County of Erie.

Dr. Thompson was a representative physician in the region where he practised medicine and his services were often sought by his colleagues in the capacity of consultant. He was of commanding figure, of amiable disposition, skilful in his profession, an upright, honorable citizen and justly entitled to the grand old name of gentleman. His friends, neighbors, patients and colleagues were warmly attached to him and his memory will ever remain green in their hearts.

The funeral of Dr. Thompson was held at Angola, March 9, 1904, under the auspices of the masonic fraternity. The Rev. G. E. Henshaw delivered the funeral address, many persons from a distance being present. He is survived by a widow, one brother, one sister and a cousin, Norman R. Thompson, of Albany.

DR. VIRGIL O. HARDON, of Atlanta, died of pneumonia at his home in that city, February 7, 1904, aged 54 years. Dr. Hardon was a physician of repute and achieved fame in the practice of gynecology. He was professor of gynecology and obstetrics in the College of Physicians and Surgeons at the time of his death, and his colleagues testified their respect for his memory by acting

as pallbearers at the obsequies. The Atlanta Academy of Medicine also formed an honorary escort at the funeral. Dr. Hardon was a man of genial presence, of exceptional humor, and a royal companion in the social circle. He was, withal, an excellent teacher as well as a skilful physician. The *Atlanta Journal-Record of Medicine* for March, 1904, devotes its leading editorial page to a touching tribute to the memory of Dr. Hardon.

DR. THOMAS B. COSFORD, of Lockport, died February 26, 1904, at Redlands, Cal., aged 58 years. He was for many years a prominent physician of Lockport. Failing health led to a visit to California last winter, but it did not stay his disease.

DR. WILLIAM B. SOUTHARD, of Kalamazoo, Mich., a graduate of the University of Buffalo, 1859, died February 21, 1904, aged 81 years.

DR. WILLIAM A. MCCORN, of Long Island City, N. Y., University of Buffalo, 1882, died February 18, 1904.

DR. MATTHEW F. HANEY, of Humberstone, Ont., University of Buffalo, 1850, died December 3, 1903, aged 79 years.

DR. ANDRE L. COWLES, of Spartansburg, Pa., University of Buffalo, 1892, died February 18, 1904, aged 60 years.

DR. PLINY P. GORDON, of Hobart, Ind., University of Buffalo, 1865, died March 9, 1904, aged 68 years.

DR. CHARLES H. RICHMOND, of Livonia, N. Y., died at his home March 2, 1904, aged 63 years. Dr. Richmond graduated in medicine at the University of Buffalo in 1860, and was commissioned assistant surgeon 104th N. Y. Infantry, December 6, 1864. He was mustered out of service with his regiment July 17, 1865. After the war he settled in Livonia and became one of the foremost physicians of his region. He served for 10 years as president of his village and was identified with its growth and improvement.

DR. WILLIAM J. McDERMOTT, of New York, died March 12, 1904, aged 73 years. After graduation in 1854, at New York University, he settled in Westchester county, and was elected to the assembly in 1860. He resigned his seat to accept a commission as surgeon of the 66th N. Y. Infantry,—a regiment in which he was twice appointed surgeon. He resumed his practice at Westchester after the close of the war and so continued until his last illness.

DR. GEORGE L. RICHARDS, of Fall River, Mass., ex-president of the Laryngo-otological section of the A. M. A., and author of *Nose and Throat Work in General Medicine*, lectured at the University of Buffalo, Monday, March 28, at 4 p. m., under the auspices of the laryngological section of the Buffalo Academy of Medicine. Subject—Diseases of the accessory sinuses with special reference to the maxillary antrum. In the evening Dr. Richards was entertained by the Roswell Park Medical Club.

THE Physicians' Club at its annual meeting held March 9, 1904, elected the following-named officers for the ensuing year: president, J. Henry Dowd; vice-president, F. M. Boyle; secretary, W. C. Callanan. Papers were read by Drs. Dowd, J. W. Nash and J. J. Finerty.

THE tenth quadrennial congress of Polish Physicians and Scientists, appointed to be held at Lemberg, July 20-24, 1904, has been postponed to an indefinite period on account of the Russo-Japanese war.

COLLEGE NOTE.

THE University of Buffalo will hold its fifty-eighth annual commencement early in May. A large and intelligent class will be graduated from the medical department. The other departments, too, are making correspondingly excellent showing for commencement day.

BOOK REVIEWS.

BLOOD PRESSURE IN SURGERY. An Experimental and Clinical Research. The Cartwright Prize Essay for 1903. By GEORGE W. CRILE, A. M., M. D., Professor of Clinical Surgery, Western Reserve Medical College, Cleveland. Octavo, pages 422. Illustrated. Philadelphia and London: J. B. Lippincott Co. 1903.

The wide diversity of opinion upon the causes of low blood-pressure in surgical cases and of the methods of combatting the same, led the author to institute an extensive series of investigations upon the subject, with the view to determine among other things the action of the more common agents used for stimula-

tion ; to determine what produces lowered blood-pressure, whether exhaustion of the bloodvessels, of the heart, of the vasomotor, of the cardiac center, or of the respiratory center ; whether it be an exhaustion or suspension of function or the passages of plasma through the vessel walls, and the like. Among the drugs employed were included, alcohol, nitroglycerin, amylnitrite, digitalis, strychnin, saline infusion, adrenalin, and morphine ; and the conclusions arrived at after most painstaking and exhaustive experimentation are both surprising and instructive.

Briefly summed up they are as follows: alcohol was found invariably to be a depressant, and the more pronounced the shock the more depressant its action. Nitroglycerin and amylnitrite also almost uniformly depressed the blood-pressure and increased the shock. Digitalis increased the blood-pressure in normal doses, but it seemed on the average that the cases of shock so treated did not live as long as the controls. Strychnin in sufficient amount caused rise in blood-pressure, the rise being proportional to the shock, but in every degree of shock after administration of therapeutic doses the animals finally passed into deeper shock.

Whenever the foregoing drugs were given in conjunction it was found that digitalis and strychnia supplemented each other very well and a steady and well sustained rise in pressure followed their administration. When nitroglycerin was used, whether after or simultaneously with digitalis and strychnin, there was invariably a fall, in some instances compensation being partial, in others, complete. Alcohol was always found to be a progressive depressant.

The author, summing up his conclusions upon these points, says, "one might be able to so adjust the dosage of strychnin, digitalis, amylnitrite and nitroglycerin that they might neutralise each other in their immediate effect upon the blood-pressure. The experimental data show that the treatment of shock by the most commonly employed stimulants—namely, strychnin, brandy, digitalis and nitroglycerin, produced systemic confusion in the animal. Saline infusion always caused a rise in pressure, which was usually gradual and sustained in proportion to the amount of shock present when it did not exceed a moderate degree ; in the more pronounced cases the rise was not so marked or well sustained. The blood count and hemoglobin estimations showed that the blood was not much diluted by the saline. Adrenalin, in the normal animal, in every degree of shock and collapse, and under all conditions, caused a rise in blood pressure following its exhibition. Morphine given before etherisation gave better results than etherisation alone, and the two formed a combination under which more extensive operations and procedures over a longer period of time were possible, than by means of ether or chloroform anesthesia alone."

Many interesting and instructive observations upon cocaineisation of the stellate ganglia to prevent shock, upon the effect of

pressure upon the circulation, including the use of the pneumatic rubber suit upon patients to maintain a constant pressure in prolonged and extensive operations; many clinical observations upon blood-pressure in which the various methods of estimation are clearly and exhaustively given, and finally the conditions of blood-pressure existing under various normal conditions of the body and in varied pathological states, and a study of the changes in the blood-pressure during surgical operations conclude the pages of this most admirable work.

One thing deserves especial mention, and that is, the differentiation which the author makes between shock and collapse; inasmuch as the therapeutic indications are so different in the two conditions. Crile believes surgical shock to be an exhaustion of the vasomotor centers, in which the heart-muscle, the cardiac centers, and the respiratory centers are only secondarily involved; whereas collapse is due to the suspension of the cardiac or of the vasomotor mechanism, or to hemorrhage; and the desirability of accurate differentiation is emphasised by his conclusions upon the treatment of the two conditions. For example, in shock, therapeutic doses of strychnin are inert, physiologic doses are dangerous or fatal; if not fatal increased exhaustion follows. Stimulants of the vasomotor center are contraindicated in shock; cardiac stimulants have but a limited range of possible usefulness, and may be injurious. In collapse, stimulants may be useful, because the centers are not exhausted. Saline infusion in shock has a limited range of usefulness; in collapse it may be effective; the blood tolerates but limited dilution with saline solution; elimination takes place through the channels of absorption; its accumulation in the splanchnic area may be sufficient to fix the diaphragm and the movable ribs, causing death by respiratory failure. In shock, it raises, but cannot sustain the blood-pressure.

Adrenalin acts upon the heart and bloodvessels, raising the blood-pressure in the normal animal; is rapidly oxidised by the solid tissue and by the blood; its effects are fleeting; it should be given continuously; its clinical value still remains unproved. The pneumatic rubber suit provides an artificial peripheral resistance, without injurious side effects, and gives a control over the blood-pressure within a range of 25-60 mm. mercury. Crile says that "by the combined use of artificial respiration rhythmic pressure upon the thorax over the heart and the infusion of adrenalin, animals which were apparently dead as long as 15 minutes were resuscitated; by the same method, with the addition of the rubber suit, a patient who from fatal injury of his brain had been conventionally dead for 9 minutes was partially resuscitated for 32 minutes, during which time a strong heart-beat was noted and he was able to move his head."

The work, as a whole, is a monument to the industry and intelligence of its author, and should be read and digested by every practising physician and surgeon.

J. P.

THE AMERICAN YEARBOOK OF MEDICINE AND SURGERY FOR 1904. A Yearly Digest of Scientific Progress and Authoritative Opinions in all branches of Medicine and Surgery, drawn from journals, monographs, and textbooks of the leading American and foreign authors and investigators. Arranged, with editorial comments, by American specialists, under the editorial charge of GEORGE M. GOULD, A. M., M. D. Volume I, *General Medicine*. Octavo, 673 pages, illustrated. Volume II, *General Surgery*. Octavo, 680 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1904. (Per volume: Cloth, \$3.00 net; half morocco, \$3.75 net.)

An examination of the contents of this valuable reference book will at once suggest the enormous labor required to prepare it for publication. Only men of experience and judgment in the selection and condensation of material could produce such satisfactory results within the time limit set. The several departments are presided over by just the kind of men needed to accomplish the task, and over all sits in calm, impartial judgment the master spirit of the enterprise.

The same general plan of make-up and style of printing, as has prevailed for the last few years, continues, except that, beginning with the present issue and to be continued in the future, is a general summary of the noteworthy advances and discoveries in each department published at the head of each of the several topics or branches dealt with. This enables the reader to grasp the novelties and improvements in a few moments, hence, it cannot fail to be an acceptable addition. Illustration has been used with considerable liberality, there being fourteen full-page plates, besides numerous pictures throughout the text, especially in the surgical volume. The Gould-Saunders' yearbook continues to maintain the supremacy established for itself in the beginning by editor and publishers.

A TEXTBOOK OF CLINICAL ANATOMY. For Students and Practitioners. By DANIEL N. EISENDRATH, A. B., M. D., Clinical Professor, of Anatomy in the Medical Department of the University of Illinois (College of Physicians and Surgeons); Attending Surgeon to the Cook County Hospital, Chicago. Octavo, 515 pages, with 153 illustrations, a number in colors. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Cloth, \$5.00 net; sheep or half morocco, \$6.00 net.)

The subject of anatomy, and especially clinical anatomy, is so closely allied to practical medicine and surgery that it is absolutely impossible for a physician or surgeon to practise his profession successfully, unless he has an intimate knowledge of the human structure. The regular lectures in anatomy and the hours spent in the dissection room during the first year of a medical course, are far too short to give the student that thorough knowledge of the subject which is the cornerstone of medicine itself. The study of regional or topographic anatomy is rarely taught and, thorough as the student may be in the subject, he knows very little of applied anatomy or, as the author terms it, clinical anatomy.

The primary object of the work is to serve as a bridge for both practitioner and student from the descriptive anatomy as usually taught, to its daily application at the bedside or in the operating room. The author has gone to work with a thoroughness and precision that bespeaks much experience and a complete mastery of the subject in hand. He has mapped out the size and relations of the various organs,—the nerves, muscles, and bloodvessels to each other,—on the surface of the body, has made transverse sections showing the internal relation of organ to organ, the relation of muscles to bone in fractures of the latter, the resulting deformities, the relation of the epiphyses to the joint surfaces,—in short, he has covered the body with surface marking of every phase of anatomical development. Many of these markings are exceedingly clever and novel and are the results of painstaking study. The outlines have been marked upon a normal artist model then photographed, hence no error has been made in transferring.

The photographs have been reproduced in the highest style of art, and are printed on heavy glazed paper. The descriptions accompanying the illustrations are clear and concise and the rules for determining the various bony landmarks are of great assistance to the reader. The work, indeed, is superb,—text illustrations, paper, typography and binding being of unusual excellence.

W. C. K.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By Various Writers. A new edition, completely revised and rewritten. Edited by ALBERT H. BUCK, M. D., New York City. Nine volumes, imperial octavo. Volume VII. Illustrated by chromolithographs and 688 half-tone and wood engravings. New York: William Wood & Co. 1902. (Price, muslin, \$6.00 per volume; leather, \$7.00 per volume; half morocco, \$8.00 per volume.)

This is the day of epitomes, condensations, yearbooks, and dictionaries of medical science. A busy doctor wants information on some urgent points and he wants it quickly,—now. As a matter of fact, however, he needs something more than a mere hint; he requires a condensed history or abstract of the subject in hand, and in this reference handbook, *par excellence*, he gets just what he most needs,—namely, a succinct, carefully prepared synopsis of every topic of practical value in the whole domain of medical science.

This seventh volume embraces topics from Sacc to Ulc of the alphabet, and contains some of the most important material in medicine; for example, diseases of the spine and spinal cord, syphilis, tuberculosis, and typhoid fever. The articles on the spine and spinal cord are almost exhaustive, so thorough are they in description and treatment. The same might be said with a truth of the other three titles named, as well as of still others in the book not mentioned. Two more volumes will finish the series and it then

will form the most complete reference handbook that has been published. No reference library can be considered as properly equipped without a set of these books.

CLINICAL PATHOLOGY OF THE BLOOD. A Treatise on the General Principles and Applications of Hematology. By JAMES EWING, M. D., Professor of Pathology, Cornell University Medical College, New York. Second edition, revised and enlarged. Octavo, 492 pages, with 43 engravings and 18 full page colored plates. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$3.50, net.)

The blood is receiving but recently the study to which its importance, both physiologically and pathologically, entitles it; or, to state the point more directly, pathologists are beginning now to investigate this important fountain-head of many diseases which long ago wrought havoc with human life. That the blood stream as a disease carrier should have escaped observation so long is almost incomprehensible. However, we are now in the flood-tide of this neglected domain and our investigators are making surprising progress in this field of discovery. Ewing, the author of the book before us, ranks as one of the foremost students in this branch of science and has given the profession one of the best books published in relation to the pathology of the blood. The first edition of two years ago became exhausted early and is replaced by this one which has been improved by the inclusion of whatever of value has been brought out since the appearance of the original book.

Only a very meager conception of the great labor involved in a revision of this treatise may be formed from the statement that 400 new articles have been examined and added to the bibliographical lists and their principle points incorporated in the text; that changes have been made relating to technic, the serum test for blood and crioscopy; also enlargement of the presentation of morphology of the blood; additions of the topic of leukemia; presentation of Ehrlich's theories on immunity, and several other improvements in text and illustration, which serve to make this a conspicuous and reliable textbook on the blood.

GENERAL PATHOLOGY, OR THE SCIENCE OF THE CAUSES, NATURE AND COURSE OF THE PROCESSES OF DISEASE. By DR. ERNEST ZIEGLER, Professor of Pathological Anatomy and of General Pathology in the University of Freiburg in Breisgau. Translated from the tenth revised German edition, and edited by Alfred Scott Warthin, M. D., Professor of Pathology and Director of the Pathological Laboratory in the University of Michigan, Ann Arbor, Mich. Octavo, pp. 783. Illustrated. New York: William Wood & Co. 1903. (Cloth, \$5.00.)

Ziegler's pathology has become such a classic that it requires no introduction to the teachers or students in America. It has been an accepted authority in this department for nearly a generation. The tenth edition of the work just published in Germany, shows a very radical revision in most of its sections. It is scarcely

necessary to add that it is quite abreast of the period in every way and reflects in a remarkable degree the reputation of its distinguished author for clear, lucid and scientific treatment of the subject.

The general arrangement of the topics remains about the same as in former editions. The author does not change his opinion as to the nature and character of tumor formation, but believes his standpoint has been strengthened in spite of the attacks directed toward him. The chapters on animal and vegetable parasites have been carefully revised and enriched by numerous illustrations. The references have been brought down to 1900 and many American annotations have been added by the translator.

The translation has been exceptionally well rendered and much credit is due Professor Warthin for his painstaking work. Many new illustrations, some of which are in colors, also appear in this edition, which leaves little to be desired in the way of mechanical execution.

W. C. K.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM. Second series. Subjective Sensations on Light and Sound, Abiotrophy and other Lectures. By SIR WILLIAM R. GOWERS, M. D., F. R. C. P., F. R. S., Honorary Fellow Royal College of Physicians, Ireland, etc. Small octavo, pp. 250. Philadelphia: P. Blakiston's Son & Co. 1904.

The student of medicine, or of any branch thereof, cannot fail to find food for thought in the writings of Gowers. This is because the author has always based his specialism upon the widest knowledge of general medicine. In his lecture on specialism he places himself on record in the following terms:

"Every province of disease abounds in illustrations of the degree to which the special involves the general. No man can be a true specialist who has not an adequate practical acquaintance with the whole range of one of the two great branches of professional knowledge,—surgery, medicine. There is no part of medicine in which a so-called nerve specialist must not be at home. These facts must be recognised by practitioners."

Because of this belief and because Gowers has always written from the standpoint of the neurologist with a practical acquaintance of the whole range of medicine, his lectures are of value to the profession at large. The present series of ten lectures is full of interest and is of special value.

J. W. P.

A MANUAL OF BACTERIOLOGY. By HERBERT U. WILLIAMS, M. D., Professor of Pathology and Bacteriology, Medical Department, University of Buffalo. Duodecimo, pp. 351. With 99 illustrations. Third edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, \$1.75.)

A good book treating on an important subject is sure to pass through a number of editions. The work before us is getting its just deserts in the direction indicated. We have expressed heretofore, in noticing previous editions, our opinion of this

manual,—an approval that we maintain unchanged as we examine this latest issue.

The text has been prepared with special reference to the needs of a beginner in the study of bacteriology and, also, to meet the clinical requirements of the physician. Such additions as have been made, to keep it abreast of the present time in its scientific aspect, have not materially increased the size of the book. New illustrations have replaced some of those in former editions, and some other changes have been made which give freshness to its appearance and bespeak the spirit of progress which characterizes the work of its distinguished author. The chapter on disinfectants and antiseptics, by Dr. Thomas B. Carpenter, and one on the Surgical technic of disinfection, asepsis, and antisepsis, by Dr. Marshall Clinton, are of great practical value, and deserve the careful study of the beginner in surgical work, but especially of the careless surgeon. As a whole, the Williams manual has not been excelled by any similar work in the book market.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Volume IV. Thirtieth series. 1904. Philadelphia: J. B. Lippincott Company. 1903. (Cloth, \$2.00.)

This volume includes articles on treatment, medicine, surgery, gynecology and obstetrics, neurology, orthopedics, ophthalmology, and pathology. Among the foreign contributors are the names of Albanan, Battle, Burnet, Corner, Duckworth, Duncan, James, Julien, Pinard, Poynton, and Valude. The home lecturers include the names of Brower, Clayton, Coomes, DaCosta, Davenport, Dugan, Favill, Frank (Louis), Keen, McFarland, Musser, Porter, Preble, Satterthwaite, Senn, Tyson, Wiggin, and Wood.

The subjects of these lecturers cover a wide range of topics and the material cannot fail to interest specialists, as well as general practitioners. The illustrations are of excellent quality, though not as numerous as could be wished. Dr. Davenport's article on displacements of the uterus is the best illustrated of any in this volume and will prove of great value to the country practitioner. The high standard of these clinics continues and with steady improvement.

SCHEME FOR THE DIFFERENTIAL TESTING OF NERVES AND MUSCLES. For use in Diagnosis. By J. MONTGOMERY MOSHER, M. D., Clinical Professor of Insanity, Neurology and Electrotherapeutics, Albany Medical College. Octavo, 58 pages; illustrated. Albany: Brandon Printing Co. 1903. (Price, \$1.00.)

The importance of electrodiagnosis in the prognosis of many nervous diseases is so well recognised and so universally accepted

that any device for simplifying the practice is to be gladly welcomed. Very few physicians, however, take the necessary time or have the properly equipped apparatus for making such tests, and, if an electrodiagnosis is to be made, the services of a specialist are enlisted. Many of the simpler cases could be tested in the general practitioner's office and to those who so desire the volume of Mosher will be specially advantageous. An outline of the subject only is here given,—the details are to be sought for in the larger works of von Ziemssen, Lewandowski and others.

The author gives explicit directions for the application of electrodes in testing the various motor points of the muscles and nerves; also, a short description of the reaction of degeneration, and cleverly devised tables for recording the results of electro-examinations. The illustrations of the motor points are well executed and add much to the general usefulness of the book.

W. C. K.

CLINICAL TREATISE ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By PROF. DR. CARL VON NOORDEN, Physician-in-Chief to the City Hospital, Frankfurt a. M. Authorised American edition, translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part IV. The Acid Autointoxications. By Prof. Dr. Carl von Noorden and Dr. Mohr. Duodecimo, pp. 80. New York: E. B. Treat & Co. 1903. (Price, 50 cents.)

A monograph on this subject forms useful reading for a busy physician. The various phases of the subject are considered under the following heads: General remarks on autointoxication with acid products of metabolism; the sources of the acetone bodies; where are the acetone bodies formed? pathological nondiabetic acetonurias; diabetic acidosis; and therapeutic considerations.

It is a book that can be carried in the pocket, hence may be used to refresh one's thoughts during travel. The scientific treatment of the topics dealt with is most gratifying.

BOOKS RECEIVED.

Diseases of the Intestines. A Textbook for Practitioners and Students of Medicine. By Max Einhorn, M. D., Professor of Medicine at the New York Post-Graduate Medical School and Hospital. Small octavo, pp. 397. Illustrated. Second, revised edition. New York: William Wood & Company. 1904. (Price, \$3.00.)

The International Medical Annual. A Yearbook of Treatment and Practitioner's Index. Thirty-two contributors, American and Foreign. Twenty-second year. Octavo, pp. 750. New York and Chicago: E. B. Treat & Co. 1903. (Price, \$3.00.)

The Man Who Pleases and the Woman Who Charms. By John A. Cone. Sextodecimo, pp. 131. Hinds & Noble, New York: 1904. (Price, 75 cents.)

A Practical Treatise on Nervous Diseases: For the Medical Student and General Practitioner. By F. Savary Pearce, M. D., Professor of Nervous and Mental Diseases in the Medico-Chirurgical College, Philadelphia.

Octavo, pp. 422. Illustrated. New York and London: D. Appleton & Co. 1904. (Price, \$3.00.)

Progressive Medicine, Volume I, March, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 337 pages, 7 illustrations. Lea Brothers & Co. Philadelphia and New York. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

A Manual of Clinical Diagnosis by means of Microscopical and Chemical Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D., of Baltimore. Fifth edition, thoroughly revised and enlarged. Illustrated with 150 engravings and 22 plates in colors. Octavo, pp. 695. Lea Brothers & Co., Philadelphia and New York. 1904. (Price, \$4.00.)

A System of Practical Surgery. By Drs. E. von Bergmann, of Berlin, P. von Bruns, of Tübingen and J. von Mikulicz, of Breslau. Translated and edited by William T. Bull, M. D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York., and Walton Martin, M. D., Instructor in Surgery, College of Physicians and Surgeons, New York. To be complete in five imperial octavo volumes. Volume I, pp. 936. With 361 engravings and 18 plates. Lea Brothers & Co. Philadelphia and New York. 1904. (Price, per volume: Cloth, \$6.00; leather, \$7.00; half morocco, \$8.50.)

Atlas and Epitome of Operative Gynecology. By Dr. O. Schäffer, of Heidelberg. Edited, with additions, by J. Clarence Webster, M. D. (Edin.), Professor of Obstetrics and Gynecology in Rush Medical College, in affiliation with the University of Chicago. With 42 lithographic plates in colors, many text cuts, a number in colors, and 138 pages of text. Philadelphia, New York and London: W. B. Saunders & Company. 1904. (Cloth, \$3.00 net.)

Obstetrics for Nurses. By Joseph B. De Lee, M. D., Professor of Obstetrics in the Northwestern University Medical School, Chicago; Lecturer in the Nurses' Training Schools of Mercy, Wesley, Provident, Cook County, and Chicago Lying-in Hospitals. Duodecimo, fully illustrated. Philadelphia, New York and London: W. S. Saunders & Company. 1904. (Cloth, \$2.50 net.)

MISCELLANY.

CIVIL SERVICE EXAMINATIONS FOR STATE AND COUNTY SERVICE. THE State Civil Service Commission announces general examinations to be held April 19, 1904, including the following positions: apothecary in state hospitals and institutions, assistant in entomology in the state museum, bridge designer, bridge draughtsman, building inspector, foremen of earth and rock borings, health officer for the town of Coventry, physicians in state hospitals and institutions of both regular and homeopathic schools, stenographer in state hospitals and institutions.

General examinations for stenographers will be held from May 25 to June 30. Applications for these examinations must be made on or before April 14. Full particulars of the examinations and blank applications may be obtained by addressing the Chief Examiner of the Commission at Albany.

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ORIGINAL COMMUNICATIONS.

Sterility and Its Treatment.¹

By HERMAN E. HAYD, M. D., M. R. A. S., Eng., Buffalo, N. Y.

THE introductory chapter in Coe and Keating's *Gynecology* is from the pen of the late William Goodell, and to those who have not read it I commend it, because I think it is one of the classics of modern medicine. He says, that undoubtedly some of the worst forms of women's diseases come from the three following causes: the specific infection of wives by their husbands; criminal abortion; and the prevention of conception. So long as society condones in a man such lapses of virtue as it peremptorily and pitilessly condemns in woman, so long as a chaste woman is willing to take to herself an unchaste husband, so long will young men indulge in illicit sexual pleasures. Sterility, miscarriages, oöphoritis, salpingitis of every kind and degree, pelvic and intestinal adhesions, chronic ill health, and even death must necessarily result from such marital unions.

The article in the *American Textbook of Gynecology*, from which I have taken much of my paper says, sterility in the female implies an inability to bring forth a living child. This condition may be either relative or absolute,—relative when there is simply diminished procreative power, and absolute when procreation is impossible. Sterility may be congenital, in which case it results from a faulty development of the organs necessary for procreation. It is more often acquired, and is then due to diseases involving one or more of the organs necessary for the process of genesis.

Matthews Duncan says that one marriage in every ten in Great Britain is sterile. Statements of this character are, as a rule, valueless, because many women are childless from intentional causes during early married life, and when the inevitable

1. Read before the Buffalo Academy of Medicine, March 22, 1904.

yearning for offspring comes, like Rachel, they are not comforted. Women do not ordinarily conceive during the nursing period, or after the climacteric; and this condition is spoken of as physiological sterility. Again, many women conceive, but are not able to carry the ovum through the necessary period of uterogestation from diseases of the uterus and its lining membrane, or causes inherent in the ovum.

For the process of generation in the female, various organs are necessary, and upon their degree of development and tonicity results fecundity or absolute or relative sterility. Many men are sterile; and some authorities estimate the percentage quite high, but this phase of the subject need not interest us especially this evening, as the fertility of the male fluid can be easily and quickly ascertained by examining the number, size and vitality of the contained spermatozoa, and if they are found to be normal fecundation should result from sexual union in a healthy woman.

An interesting experience occurred to me during the past few weeks, but, as it had happened before, I was on the alert. Two years ago a young bride consulted me on account of certain distressing symptoms about her pelvic organs. Upon examination, there was found an erosion of the cervix and cervical and uterine catarrh. She was curetted at the German Hospital, and, so far as her feelings were concerned, she was well and happy. After two years of married life without children, she again called, to find the cause of her sterility. Upon examination, I found her organs well and healthy, and I suggested that she send her husband to me, who is a large, fine, healthy, young man. He gave me a history of having had gonorrhea five years previous to marriage, and with the attack he had double orchitis. I had him bring me some of his seminal discharge, collected by means of an ordinary condom, and I found it filled with prostatic crystals, but absolutely no spermatozoa.

Many women have been subjected to needless pain and operations for the cure of sterility, when the cause existed in the husband and could be so fully established by such simple means. However, even when nature has provided normal genitalia and appendages,—in fact, all the essential organs of reproduction,—barrenness often results from enfeebled general health, gout, syphilis, excessive obesity, anemia, chronic alcoholism, and the like.

It is said the vagina, which is the natural receptacle for the male fluid, is bathed with an alkaline mucus in health, but from various diseased conditions this natural alkalinity is disturbed, and, as a result, the spermatozoon is killed. Such conditions are frequently seen in the various forms of vaginitis and particularly when of

specific origin, which is most common in adult women. Hyperacidity is often due to general and constitutional causes, and must be corrected by means that will counteract them, such as the administration of alkalis and tonics, the employment of alkaline douches, the avoidance of stimulating foods and drinks, sexual abstinence; and, if possible, one or two daily bowel movements are to be encouraged by salines. One cannot say what degree of acidity is necessary to be lethal to the active ciliary movements of the spermatozoa, as some women become pregnant when the uterine and vaginal secretions are decidedly acid, as shown by litmus paper tests.

Leaving out the question of malformations and imperfect development of the vagina, various injuries are capable of producing sterility, such as extreme lacerations, which shorten and straighten the canal, elephantiasis, labial tumors, thick imperforate hymen and vaginismus.

Vaginismus is a quite common cause of infecundity; first of all, because it offers a great barrier to the proper performance of the sexual act; and, second, because the fissure, or erosion, or the painful caruncle which is so often the cause of it, keeps up the constantly irritating discharges. Within the past six months, I have treated a most obstinate case of vaginismus, first by forcible dilatation under chloroform, and then the removal of the hymen and its irritable carunculæ. Intercourse was still impossible, when I discovered a painful vaginal fissure which made the approaches of the husband intolerable. This I painted with a thirty-grain solution of silver nitrate. For another month graduated bougies were given the woman, and these were to be introduced daily into the vagina and left in position for a half an hour, until the spasm and pain were relieved. A perfect cure has resulted, and I presume pregnancy will soon follow. I have had a number of similar experiences during the past ten years.

The uterus may be defective in size, or absent, and as a result—sterility. Uterine stenosis is one of the most common causes of sterility,—first of all, on account of the obstruction it offers to the ready entrance of the spermatozoa; and, second, because of the mucus plug which usually fills up the canal, the result of associated endocervicitis and endometritis, due to the poor and deficient drainage.

In this class of cases, I am not content with the usual practice of treatment—namely, dilatation and curettage and packing with iodoform gauze. This I have found inadequate, and have used instead of the gauze a stem pessary, which is worn for weeks. These uteri are, as a rule, small and poorly developed; are often anteflexed, with the cervix long and pointed and, even when these

uteri are thoroughly dilated, the canal very soon recontracts and closes to its original pinhole dimensions. I have observed a number of successful pregnancies to follow after this line of treatment; and I am satisfied that the stem not only provides a permanent opening, but gives tone and increases the growth and development of the uterus.

Let me detail the history of one case, which was operated upon previously. Mrs. V., aged 31 years, married six years, came to me the picture of health, but without children. Dr. Frederick curetted her two years before I saw her. Under chloroform I dilated the cervix, and curetted and painted the cavity of the uterus with one part of carbolic acid and two parts of tincture of iodine, and instructed her to wear a stem pessary for seven weeks, which was inserted at the time of the operation. It was then removed, and three months afterward she became pregnant. I delivered her with forceps, in due time, of a fine, healthy girl. Since then I have attended her for a boy, and have attended her in two provoked miscarriages.

Much harm can result from the careless and indiscriminate use of stem pessaries; but in a woman with healthy tubes and ovaries, and a movable uterus, no injury will follow their employment when provided with the slot on the side to favor drainage. I always instruct the woman to send for me if she complains of any pain and tenderness; and if she does not live in the city I instruct her how to remove the instrument at the first suggestion of discomfort.

Uterine deviations, with their associated catarrhs, are frequent causes of sterility or miscarriage, and particularly when the cervix is torn and turned out as a result of a previous labor. Curettage and drainage, and such plastic operations as may be necessary, and the Alexander operation for posterior displacements, when indicated, have brought me the most pleasant and most satisfactory results. I have now eleven patients upon whom I have performed the Alexander operation, who have conceived and were safely delivered, and in whom the uterus has remained in perfect position after confinement. Three of these never had children or a miscarriage previously, and two of them had had no children, one in five years, and the other in eleven years.

I am satisfied that many cases of endometritis have associated with them slight tubal disease, perhaps not sufficient to close the tube but, at all events, enough to lessen its elasticity, who are cured of their endometritis and tubal complication by a thorough curettage and iodoform pack,—cured symptomatically, and subsequently bear children.

Hyperinvolution is an occasional cause of sterility, and is seen

in women who have borne a child. The uterus is very small and hard, and often only measures one and a half or two inches in size. Little can be done for this condition other than by electricity, in the form of intrauterine galvanisation, and the wearing of a stem pessary.

Tumors of the uterus are often a barrier to conception and subsequent pregnancy; and occasionally they can be removed even when gestation exists. In a paper written by Emmet, in the *American Gynecological and Surgical Journal*, June, 1900, he reports nine cases where myomectomy was performed on the pregnant uterus without inflicting any injury, and without causing premature expulsion of the ovum. Hysterectomy is not always necessary in cases of fibroid tumors of the uterus, for in many cases large tumors can be shelled out of their peritoneal covering; or, when attached by a pedicle, it can be cut and the uterus be left to functionate as though nothing had happened. Polyps and tumors presenting low down in the cervix likewise can be often easily removed.

Inflammations of the tubes and ovaries are very frequent causes of sterility. The tubes may be normal in size and appearance, and yet closed at their proximal end; or they may be enlarged and thickened by inflammatory exudate, or filled with pus, water or blood. They may be flexed, or so held out of position by adhesions as to make it impossible for their fimbriated ends to approximate to the rupturing Graffian follicle, and thus they do not receive the ovule; or their ciliary epithelial lining may be lost, so that the progress of the ovule is impeded, and then there may be developed an extrauterine pregnancy, if the ovum becomes segmented in the oviduct; or the ovaries may be so bound down and imbedded in adhesions that it is impossible for the Graffian follicle to rupture, or at all events to rupture at an exposed and accessible spot; or the ovarian tissue may be so disorganised as to be incapable of functioning, either from inflammation or the development of a neoplasm, solid or cystic.

Many conservative operations have been performed upon both tubes and ovaries, and pregnancy has followed. The tubes have been opened, or have been resected, and their mucous linings have been turned out. The ovaries have been resected, and even transplanted into the broad ligaments, and pregnancy has followed. It is surprising to see what nature has done with very small pieces of ovary and tubes, when they have been healthy and capable of functioning. Dr. Polk, of New York, reported a case where he removed an ovary from one side and the tube of the opposite side, and yet pregnancy took place, showing that the tube of the one side passed over to the ovary of the opposite side.

and picked up the ovule from its ruptured Graffian follicle. If this explanation is doubted, then it must be assumed that a small piece of ovary was left in the bite of the ligature, and yet so small that Dr. Polk overlooked it.

In one of my cases, we removed from a young unmarried woman the right tube and ovary for a large hydrosalpinx and ovarian cyst, and left the other tube and ovary, although it was pulled out of a nearly solid mass of inflammatory exudate. It appeared, however, reasonably healthy, although much bruised and swollen, so that the risk of leaving it seemed justifiable. Since the operation, she has married, and is now the mother of one boy and three beautiful girls.

Another interesting case was that of a young Italian woman, from whom Dr. Ingraham had removed the right tube and ovary. The left was healthy. I saw her two years after the operation, and found her suffering with an acutely retroverted movable uterus. I performed an Alexander operation upon her at the German Deaconess's Hospital, and since then Dr. Stein has attended her in two confinements, and she is now pregnant a third time. All this has occurred in less than four years, showing that one ovary and tube and a healthy uterus, are capable, under normal conditions, of multiplying and replenishing the earth so satisfactorily that race suicide, at all events among our foreign population, need not anxiously concern our statisticians and bureaus of vital statistics.

In view of such possibilities, and after reading the reports of conservative operations upon the appendages, by many different operators, it behooves us to leave as much of these organs as would be consistent, without inflicting too much possible risk and future suffering. We are not only to retain the important function of menstruation, but to encourage the possibility, if not probability, of pregnancy.

493 DELAWARE AVENUE.

Animal Therapy in Tuberculosis.

By EDWARD T. SMITH, M. D., Buffalo, N. Y.

ANIMAL therapeutics is now a well-defined therapy in many diseases, but up to the present time very little attention has been paid to the treatment of tuberculosis by the new remedies that fall within this category. By animal therapy I do not mean the use of the many serums and toxins that have been and are still used hypodermatically in this disease, or the internal admin-

istration of dessicated organic and glandular extracts. We have seen the rise and fall of so many serum and toxin cures for tuberculosis, that I wish to say now that I am not advocating any improvement or modification of those methods. The great danger in the use of toxins and the many disturbances of the digestive tract from the internal use of dessicated and liquid extracts have worked their own ruin in tuberculosis. Nothing can be said in favor of the chemical treatment by hypodermatic injection as the utter failure of Edson's aseptolin, gold, gold and manganese and many others testify.

It is, perhaps, treading upon dangerous ground to advise an entirely new way of treating this disease, but I have endeavored to fortify myself before so doing. I, in common with the great majority of physicians, have lost confidence in the many drugs and methods of treating tuberculosis and in the past years have turned to a new field in looking for a remedy,—the field of animal therapy. This field has been a fertile one for the many quack nostrums since the commencement of time, and has only been rehabilitated since the properties of the adrenal and thyroid glands have been discovered and used in a scientific manner.

The modern treatment of tuberculosis by supportive and hygienic measures is the most rational one and I only attempt to strengthen the method. From the Egyptian days of "henosis" to the present, all the investigators in the field of animal therapy have confined their efforts to obtain a remedy from testicular juice, either to be given hypodermatically or by the mouth. The Egyptian priests were far ahead of the present-day investigators, they injecting the finished product or semen of bulls per rectum. Testicular juice, per orem or hypodermatically, has little virtue as a remedy, while the injection of the finished product or semen in the compound, as I will later describe, has great medicinal properties as one constituent.

As the unit, I take the two-year-old bull, the nearest approach in the animal world to man in full vigor of health, an animal whose semen also is the nearest approach to human semen, and whose lymphatic and nervous systems are perfectly developed at this age, and by the process to be described, extract a lymph or cell tonic, a concentrated, vitalised, albuminous extract, representing the vitalising properties of the organs and secretions used in its preparation.

The mode of procedure is as follows: after tests to determine the healthy condition of the animal, he is closely confined for one month prior to making the cell tonic or lymph and fed freely upon grains to develop the lymphatics. During the month all the seminal fluid needful is obtained, which is preserved to add

later to the compound prepared from the other organs and secretions. After thoroughly bleeding the animal to death, the gray cerebral substance, spinal cord, gangliæ, lymph in the reservoirs and ducts, mesenteric lymphatic glands are taken, and with the addition of the semen, the mixture is thoroughly triturated in a ball mill with an equal amount by weight of distilled water and half a grain of sublimed albuminate of gold to the ounce, added as a noncoagulant and preservative. The trituration must be carried on for ten hours continuously, which is easily done by connecting the mill to a motor. If after that time has elapsed, microscopical examination shows the entire disintegration of the spermatozoæ, lymphocytes, nerve cells and lymphatic pulp, the emulsion is filtered through a porous filter at a high pressure on account of its albuminous nature and afterward treated with ether or cold to remove the fats. It is then sterilised by carbonic acid gas under pressure. The lymph, as I call it, is a clear, thick albuminous liquid entirely free from fats and is a true extract of the organs and secretions before stated. No alcohol or glycerine can be used in its preparation.

I formerly used the lymph without filtration, injecting the emulsion, but found that the connective tissue, and the like, was inert and only a new danger for contamination. The product has no action in common with the so-called lymphs and extracts, animal or vegetable nucleins, dessicated extracts, or with the many forms of tonics placed upon the market for internal administration claiming to contain its essential constituents. Prepared with rigid antiseptis it is hard to contaminate, as are all mixtures containing seminal fluid, and will keep for months if placed in an amber colored glass stoppered bottle and kept in a dark, cool place. Any contamination is shown by an opalescence.

This compound is injected hypodermatically in tuberculosis to the exclusion of all other remedies, either local or general. The points of injection are the center and outer parts of each buttock, subscapular spaces, and along the sides of the spinal column. The injections are given deeply into the connective tissue, and not into the muscle, and leave no induration. I use a half-inch steel needle and the sub-Q glass syringe, and in giving the injections, I insert the needle its full length, slowly empty the syringe and, on withdrawal of needle, hold alcohol soaked gauze on the skin and make slight massage to spread the lymph and hasten absorption. The dangers to be avoided are superficial injections, haste, deficient massage, uncleanness, and force in giving the injection. Force must not be used as it denotes injection into the muscle, a bloodvessel, or under a fascia. The lymph must flow freely with very slight pressure of the finger and if it does not

do so, the needle should be withdrawn and reinserted. I do not use a given area too frequently as there is plenty of injecting surface, although I prefer the lower dorsal and lumbar regions.

Upon standing, the compound separates into two strata, hence, before drawing into the syringe, the liquid should be gently agitated, but it should not be made too frothy. If there is any pain from the injection it should be diluted with boiled or distilled water, but the injection is generally painless and in giving thousands of injections I never have had one ill result. The syringe is washed out with alcohol after each injection and with sterile or distilled water before injection. Nothing should be allowed to come in contact with the lymph except water, else it may coagulate.

The dosage varies in different individuals, according to the severity of the disease, location, and response to cell stimulus. In some severe cases of pulmonary tuberculosis it is necessary to give 10 minims every four to six hours until the severity of the symptoms abate, when the periods may be lengthened. In other cases not so acute I have had good results from one daily injection of 20 minims. If only one dose is given daily I give it in the early evening. The usual dose is 15 minims night and morning. There is such a thing as too energetic cell stimulation and the smaller the dose that gives results the better. This compound or any cell tonic that lessens or removes morbid processes by acting upon cell structure, function, and repair must have as an aid proper cell pabulum or food, and in using this therapy a most liberal diet of easily digested food is allowed, while beef juice, or whites of eggs taken in water or some light wine are used if forced feeding is necessary. Even if a patient's digestion is normal I insist on a plain, nutritious diet, excluding raw fruits as well as vegetables that leave much residue, such as cabbage, greens, beans, turnips, and the like.

The ideal food for these patients is raw scraped beef and whites of eggs, equal parts, made into meat balls and slowly fried in butter. This food is very easily digested and most patients seem to like it. I insist upon meats in abundance if patients can digest them, preferably beef, although I allow the easily digested vegetables, but no prepared foods. The natural meat fats and cream are called for if they do not produce stomach disturbances. If the patient has any aversion to hypodermatic injections I administer the lymph in hollow rectal suppositories. This can be done, also, if from any cause it is impossible to give the second daily injection, the suppository to be given at bedtime. As this treatment must be continued for some time I discontinue treatment every seventh day to prevent intoler-

ance, if the patient is making progress. Clinical evidence shows that the great antagonists to the reconstructive action of this compound are: (1) products of indigestion; (2) constipation; (3) fatigue; (4) narcotics, alcohol in excess; (5) non-elimination; (6) venery.

Constipation is generally overcome by the tonic effect of the lymph upon the muscular coat of the bowels, but if not it is treated with the mildest remedies that have proved effective in my experience, but not with mercurials or salines. I insist upon rigid obedience in regard to the other conditions, especially as regards continence. Diluents, except in dilated stomach, salt glows to keep the skin active, pulmonary gymnastics, fresh air, and deep breathing exercises are active synergists to this therapy. Its use in tuberculosis in the manner in which I have described causes disappearance of bacilli, increases the number of leucocytes and red corpuscles, reduces fever and toxemia, eases cough and lessens expectoration, increases renal secretion, improves appetite and assimilation, causes absorption of consolidation and recent pleuritic adhesions, and cicatrises cavities. Of course the process is a gradual one on account of the reconstructive action of the compound and requires patience on the part both of physician and patient; but, as improvement generally commences very soon after institution of treatment, I have not had any trouble in that regard.

This lymph causes absorption of the induration surrounding cavities, thus allowing the blood charged with the natural anti-toxin to come in direct contact with the diseased surfaces, destroying the bacilli and producing cicatrization. The area of induration surrounding tubercular deposits and cavities is a feeble effort of the debilitated system to localise the disease, but it is practically degenerative, protecting the bacilli, and any remedy that improves the general health and removes this hyperplasia is beneficial. I will not further theorise upon its action and only claim the disease is cured in a natural manner by an extract which is a highly concentrated essence of the physical and nervous centers of an animal which is the nearest approach to man in the animal world. The lymph is a cell tonic and reconstructive simply.

In advanced cases in which there are large cavities and mixed infection with inhibited cell function from the long continued fever and toxemia, there may be small results from cell stimulation. The treatment should be used, in such cases, to prolong life and control certain symptoms, although I have seen some remarkable results where the cavities were not amphoteric. In fibrous phthisis the treatment is used as a palliative, except in its incipency, where often it is curative. The very simplicity of

this therapy is much in its favor, and the absolute safety from the injection, the cleanliness and freedom from the continual drugging and dosing of nauseating medicines also commend it. Acting upon competent advice as to dosage and locality of injection, the lymph can be given by a nurse, one of the family, if properly instructed, or even in exceptional cases autoadministration by the patient may be permitted. The necessity of sending the patient away from the comfortable home and surroundings he or she is accustomed to, is obviated, the stomach and intestines are saved for the natural processes of digestion and assimilation, and the excreting surfaces of the kidneys are not impaired by the many phenols and other irritants given internally for this disease. The therapy, moreover, is applicable to all diseases of tubercular nature and, to some patients with a tubercular family history, I have given the treatment as a preventive, on account of its power to increase cell resistance.

I administer the lymph for three months, or longer if it seems advisable to do so, and the patient is kept under observation for a few months after it is discontinued. A number of my professional friends have employed this method and their experience only confirms my own. One of their patients had returned from the south in such a condition that he was confined to his bed, his sputum contained bacilli, and he also had empyema. In three months after commencing the treatment the patient was working at his usual occupation, practically cured. It is not an experimental therapy, but one that has proven its worth after years of clinical use and it appears to me to be an amplification of the most rational and scientific treatment of tuberculosis—namely, to increase cell resistance, improve hygiene, and promote reconstruction and repair.

The most discouraging case I ever treated under this plan was a man 32 years of age with well-defined pulmonary tuberculosis, having a cavity in the right apex and all the typical symptoms of this disease, complicated with secondary syphilis, presenting large patches of eruption upon the body, and besides, he had well-marked locomotor ataxia. In three months after the commencement of treatment all the symptoms of tuberculosis had disappeared, as also had the syphilitic manifestations and locomotor ataxia. The treatment consisted of one daily injection of 20 minims. This man has remained well for three years and has been working at a particularly hard kind of labor for that period. Any therapy that will arrest such a triad of diseases in one individual at the same time deserves consideration. It is, in my view, the superior treatment for incipient tuberculosis, doing away with the tedium and anxiety of many methods now in favor,

cutting short the further progress of the disease, and restoring the tedium of prolonged semiinvalidism. My experience with this therapy in other infections and degenerative diseases will be presented at another time. A few cases of tuberculosis treated with this compound are summarised as follows:

H. M. Age 30. Consolidation of right apex, progressive emaciation and debility. Afternoon temperature 102° , expectoration scanty and contained tubercle bacilli; harassing cough and unable to work. First called to see him on account of severe pains in the head which attending physician thought meant tubercular meningitis. He was placed upon 20 minims of lymph twice daily. Pains in the head disappeared in less than two days, and after two months' treatment consolidated area in lung cleared up, bacilli disappeared, and the patient has remained well and at work ever since. This was five years ago.

J. F. Age 19. I was called to see this young man about three years ago to give my opinion as to the advisability of sending him to Phoenix, Ariz. I found him confined to his bed as the result of pulmonary hemorrhages and he was extremely anemic. A large cavity existed in the left lung, expectoration profuse, containing bacilli, temperature 103° , night sweats, pulse 130, no appetite and with all the symptoms of the later stage of tuberculosis. Under the circumstances it was suicidal to send him away, and I advised the use of the lymph compound. Placed him upon 20 minims twice daily and continued the treatment for three months. There was a gradual disappearance of all symptoms and now after three years there is no return of the disease.

D. M. Age 30. Consulted me in regard to cough, night sweats and increasing physical debility. Upon examination I found a cavity in the left apex, temperature 102° , expectoration profuse, containing bacilli and broken down lung tissue. Placed him upon one daily injection of 20 minims and one suppository at night containing the same amount; discharged him from treatment in ten weeks. Pulmonary cavity cicatrised, slight contraction of chest wall in left subscapular space, but no signs of tuberculosis. This was five years ago and patient has remained well, attending to his ordinary duties.

Mrs. C. Age 33. Persistent cough, diffuse bronchitis, great dulness over right apex and slight dulness over left, pulse 120, temperature 102° , no cavities but tubercle bacilli abundant in expectoration. Placed her upon one daily injection of 20 minims of lymph and improvement was immediate. Tubercle bacilli gradually disappeared from sputum and with the exception of slight dulness over right apex all the conditions are normal.

G. N. Age 19. Upon examination I found cavity in right apex with tubercular deposits: profuse expectoration, night sweats

and rise of temperature to 103° ; expectoration loaded with tubercle bacilli. She came of a tubercular family, her mother, grandfather and four aunts dying of the disease. Placed her upon the compound and in one month the expectoration had greatly decreased, very few bacilli remained, appetite returned, no chills or sweats, cavity lessening and patient feeling comparatively well. She felt so well that nothing I said would influence her to continue treatment any longer than two more weeks. She should have continued the treatment for at least four months, as her history was very bad. However, she married and four years later died of acute tuberculosis.

Mrs. T. Age 36. Patient greatly emaciated, right apex consolidated, pulse 126, night sweats, temperature 101° , general bronchitis, and unable to go out of the house. Gave her two daily injections of 15 minims of lymph compound for one month, when she was compelled to leave the city. As it was impossible to continue her injections, I directed 20 minims twice daily by suppositories for two months longer, when she claimed there was no necessity for further treatment, as she was in her usual good health. This was two years ago and there has been no return of tuberculosis.

189 FOURTEENTH STREET.

Typhoid Fever.¹

By THOMAS BAGLEY, M. D., Buffalo, N. Y.

TYPHOID fever is a specific infectious febrile disorder, sporadic or epidemic, often communicated by the contagion from the stools, and characterised by lesions, chiefly of the intestines, mesenteric glands, and the spleen, with the presence of the bacilli of Eberth. The disease is marked, clinically, by a variable febrile course continuing, as a rule, three or four weeks, by a rose colored macular eruption, and by pulmonary and abdominal symptoms. Of the 100 or more names applied to this disease, the one seeming most appropriate was given by Louis in 1829—namely, typhoid, meaning stupor from fever. The disease is supposed to have been known to Hippocrates, the Father of Medicine, in 460 B. C. Galen mentioned it in his medical works in 130 A. D., as hemetritious. It was not until the seventeenth century that Spigelius discovered the intestinal lesions. The distinction between typhus and typhoid was made clear by Gerhard and Pennock, of Philadelphia, in 1837, thus giving the true nature

1. Read at April meeting of the Roswell Park Medical Club.

of the disease to America before Jenner made it known to England or France.

Typhoid is one of the most widely distributed infectious diseases. It occurs in all climates, but mostly in the temperate zone. It is most frequent in the late summer or autumn, coming after a dry, hot season. It is no respecter of sex; it may occur at any age, but more frequently between the fifteenth and twenty-fifth years, less often after the thirty-fifth year, occasionally in old age, and sometimes in the fetus or infant. Some persons are more susceptible to the poison than others, a catarrhal condition furnishing a favorable soil for it.

The exciting cause is the bacillus of Eberth. It is a small bacillus, about one-third the diameter of a red-blood corpuscle, rounded at one or both ends. In the center may be seen a round shining body, either a spore or a degenerative alteration in the protoplasm. These bacilli occur singly or joined together, end to end, in filaments. They are formed chiefly in the spleen, intestinal glands, mesenteric glands, in the liver, the kidneys, the urine, the sputum, the blood taken from the red colored spots, the brain, the spinal cord, the lungs, the testicles, the heart, and in the pus taken from the pleural cavity. They have also been found in the placenta of a woman in the fourth month of pregnancy on the twelfth day after an attack of typhoid, and occasionally in the liver, spleen, and blood of the fetus. It is thought that the bacilli cannot be transmitted from the mother to the fetus unless there has been an injury to the placenta. Dr. Pfeiffer was the first to discover them in the stools. They are rarely detected before the period of ulceration, when they become much more numerous. They disappear, as a rule, about the twenty-second day.

The bacilli produce pure cultures on potatoes, gelatine, agar, blood serum, and bouillon. They grow rapidly in sterilised milk. They have been known to live in milk thirty-five days, and in butter twenty-one days. Almost all articles of diet form a good culture medium for them. Many of the cultures, however, are not characteristic, for they bear a resemblance to the colon bacillus, for which they are often mistaken. Some investigators think the Eberth bacillus is not a specific microorganism, but a modified form of a number of other closely related germs. They have been known to live in the human body for a period of fifteen months after convalescence. Twenty minutes exposure to moist heat kills them. Heavy frost fails to destroy them. They retain their vitality in ice for months. Sunlight is disastrous to their growth. They usually enter the system by the intestinal mucous membrane, while some think at times by the respiratory tract.

They grow at the expense of the tissues, and develop certain toxic agents, which produce vomiting, purging, and rise of temperature.

Typhoid is not considered contagious in the ordinary use of the term. There are no exhalations from the lungs or skin which impart the disease. It is infectious, the poison being found chiefly in the stools. However, persons handling the soiled linen of typhoid patients have contracted the disease. It is generally admitted that the dry discharge from a patient floated upon the air and breathed into the lungs of another may carry it. The lesions of typhoid are divided into two groups: first, those characteristic of the disease; second, those regarded as secondary changes, due to the effect upon the tissues of the constitutional infection, and the long continued fever.

The characteristic post-mortem changes are seen in the lymphatic structure of the intestines, in the mesenteric and other glands, and in the spleen. The alterations taking place in these glands are divided into four stages: (1) infiltration, (2) necrosis, (3) ulceration, and (4) cicaterisation. These stages may exist in different glands at different times. The neighborhood of the ileocecal valve exhibits the most advanced stages of the glandular lesions. The enlargement of the spleen begins in the middle of the first week. It may be three times its normal size, and it may return to its normal size at the end of the fifth week.

The period of incubation is thought to be about two weeks, though it is sometimes less. Cases of from one to four days duration have been reported. A sense of weakness and fatigue from exertion, light and disturbed sleep, confusion of ideas, loss of appetite, colicky pains, diarrhea, nausea, coated tongue, epistaxis, headache, aching limbs, dulness of hearing, and rise of temperature toward evening, are premonitory symptoms. The appearance during the first week is listless and apathetic. Delirium often occurs during the night. The pulse is increased, often full and of low tension, but later dicrotic.

The abdomen may become disturbed. Tenderness and gurgling sounds may be found in the left iliac fossa. At first there may be constipation; later, diarrhea with the characteristic pea soup stools. Rose colored spots appear about the seventh to the tenth day. The urine is often scant and feverish, and may contain albumin. During the second week the symptoms become aggravated. The temperature may become remittent during the third week. These symptoms may persist until the fourth week. The blood shows but little change until the third week, when the number of red corpuscles and the percentage of hemoglobin become lessened. The number of leukocytes is not very much

affected. Dry tongue, sordes on the teeth, stupor, rapid pulse, urine and feces passed unconsciously, great emaciation, and bed sores—all these denote what is termed the typhoid state. If the patient lives, these symptoms gradually subside and convalescence begins.

Typhoid fever is usually followed by one or more complications, perhaps the most serious of which is perforation of the intestine. It occurs in about 2 or 3 per cent. of all cases and is a common cause of death. It is usually looked for during the second and third week, but has occurred as early as the eighth day. It has been known to happen after the patient has fully recovered and returned to accustomed employment. Peritonitis, local or general, often follows perforation. Venous thrombosis is a frequent complication, often occurring in the femoral vein, producing edema and pain. It is more apt to affect the left leg as the left iliac is crossed and pressed upon by the right iliac artery. Sudden death is sometimes due to the transit of a thrombus from the limb to the heart, and septicemia may occur through the softening of the clot. Death also may occur simply from exhaustion after the fever has left. Falling of the hair is common after this disease. Herpes labialis, pericarditis, endocarditis, myocarditis, valvular troubles, anemia, rupture of the spleen, necrosis of the nose cartilage, edema of the glottis, perichondritis, bronchitis, lobar pneumonia, pulmonary edema, pleurisy, and acute miliary tuberculosis are other complications that may follow typhoid. Laparotomy has been successfully performed in 15 out of 2,000 cases of this disease.

Relapses are apt to occur in the second or third week of convalescence and after the absence of fever for several days. The average duration of this disease is from three to four weeks. It may prove fatal by the fifth or sixth day, and, in the malignant type, even earlier. The third week is the time of greatest mortality. Brand's method of treatment has reduced the mortality in hospitals from 10 to 30 per cent. to 5 to 8 per cent., in private practice to 10 per cent.

The prognosis is difficult. It is less fatal in children from infancy to puberty. It increases rapidly after the forty-fifth year. Some claim that the robust and corpulent more readily succumb to it; in the latter the fever runs very high. For persons of intemperate habits, and with gouty or venereal affections the prognosis is unfavorable. In pregnant women the tendency is to abort, usually with fatal results. Early development of nervous symptoms and delirium is unfavorable. If the germs which produce toxemia can be removed the disease may be prevented or aborted. General prophylaxis should be observed. A large

well-ventilated room is needed for the patient. Rest in bed is necessary from the first. The bowels and bladder need early attention. Liquid diet is safest even for a week or ten days after the fever has subsided. Alcohol should be avoided if possible. It has been said that using it indiscriminately is like borrowing money at 100 per cent.; it must be paid back at high interest. Antipyretics should be used cautiously. Strict antiseptic treatment is of the greatest importance. Hydrotherapy is a constant feature in the treatment of typhoid, and good nursing is indispensable.

1344 WEST AVENUE.

DISCUSSION.

Dr. GEO. F. COTT.—Very common lesions of the throat and larynx in typhoid are catarrhal ulcerations and paralyses. The reason why we do not have very accurate statistics with regard to these conditions, is because these parts are not examined unless there is some complaint made by the patient. In the mild types of the disease they are overlooked, often also in the severe forms, even in case of death. Lesions are noted clinically in only about 3 per cent. They are found post-mortem in 17 per cent., always of a severe nature. Some lesions are almost always due to perichondritis. The diphtheritic variety is always secondary. The bacilli have been searched for unsuccessfully. When we have severe lesions like perichondritis there is superficial inflammation always following. The cricoid cartilage has been found affected in 80 per cent. of the cases. In that it differs widely from other diseases like syphilis and tuberculosis, in which it is rarely affected. In these diseases the arytenoids and epiglottis are more commonly invaded.

Typhoid is differently considered in the old country. There they call it typhus, and divide it into abdominal typhus and petechial or exanthematous typhus. Cases of deep ulceration are usually found in the exanthematous variety, and are called laryngo-typhus. Stenosis and edema are complications that may occur from the involvement of neighboring structures, especially the thyroid gland, by which pressure causes stenosis of the trachea and larynx. The edema is supposed to be due to nearby lesions invading the larynx and causing perichondritis. Paralysis of the laryngeal muscles is a post-typhoid condition, which occurs about the fourth or fifth week. The observer who has made the best report to date, Przedborski, had 25 out of 100 cases of typhoid of the abdominal type. He had 7 out of 25 cases of the exanthematous form, all of which recovered.

The throat and larynx are most commonly affected by catarrhal ulcers and also deep ulcerations. The nose is comparatively immune to this disease; rarely catarrhal ulcerations of the cartilaginous septum produce perforation. One very common lesion,

from which diagnosis is often materially assisted, is epistaxis which occurs from the septum. Occasionally, the patient will cough up blood, which is almost invariably dark in color, because it has trickled from the nose into the throat. One also finds a condition known as rhagades, consisting of little cracks or fissures which bleed readily, and are noted almost always in the pretyphoid condition.

Superficial ulcerations which epithelium breaks down, leaving a grayish-yellow base, always get well, unless the patient has had some other severe conditions mentioned and which are very uncommon, as perichondritis and the like. They do not leave a scar, and they get well without treatment. When there are deep ulcerations, even if they do get well, they leave more or less cicatricial contraction as in syphilis. I know of a patient who had such a typhoid ulceration in the soft palate, a part seldom affected by ulceration or paralysis, in whom one quarter of it was destroyed. These lesions may occur in any period of the disease, and they may always be sought. They may produce very serious consequences in severe types. They should be treated with antiseptics. Deep ulcerations are supposed to be produced by mixed infections. In many cases the typhoid bacillus cannot be found. They are caused primarily by the debilitated condition of the patient, which gives opportunity for the inroads of mixed infections.

Elinger considers ulcers of the mucous membrane of the throat and larynx analogous to lesions in the intestines, and that whenever there is adenoid tissue, infiltration takes place and it breaks down. These typhoid ulcers are very characteristic in location, being found on the pillars of the fauces and on the laryngeal border of the epiglottis; in the aryepiglottic folds; seldom, yet occasionally, in the subglottis; very rarely if ever on the vocal chords. A condition has been described as diphtheritic typhoid in which a diagnosis of diphtheria and typhoid has been made. It is considered to be due to deep ulceration with membrane formed over them. Another condition worthy of note, where there is no particular lesion is dry mouth, the tongue being dry and hard. The temperature cannot be gotten in the mouth, or appears subnormal, while quite apparent if taken per rectum.

Ear complications are usually late, practically post-typhoid, seldom occurring before the fourth week, and from that time on, indefinitely; occasionally where there has been chronic suppuration of the middle-ear, when the temperature begins to rise, the suppuration ceases; as soon as the fever subsides the discharge begins again. The aural conditions are simply inflammatory, giving rise to more or less pain, suppuration with perforation, and profuse discharge of pus which is due to mixed infection. It may get well without any special treatment.

The next severe condition is inflammation of the mastoid process. That very often occurs before one notices any trouble with

the ear except pain. It apparently may arise simultaneously with the inflammation in the ear, before perforation of the drum. Bezold found in nineteen cases out of forty-one, marked tenderness over the region of the mastoid antrum, about the level of the upper border of the external meatus and a little behind it. In the mastoid symptoms occurred coincidently with the inflammation. In five out of forty-one there were periosteal abscesses over the mastoid without destruction of the bone. Only one case is on record where an aural inflammation due to typhoid produced thrombosis of the lateral sinus and, secondarily, death. The parotid gland is subject to inflammation in a certain number of cases. When it suppurates, it is very likely to discharge into the external canal and should not be mistaken for middle-ear infection. The reason is, there are little fissures in the cartilage, generally three, which are readily punctured by the pus, and the parotid lies immediately under the cartilage. Deafness results in the vast majority of ear complications. Why? No satisfactory explanation has been made.

Dr. J. C. THOMPSON.—Historically speaking, typhoid is one of the oldest diseases of which we have any record in the history of medicine. In the temperate and torrid zones, it has been one of the most important afflictions incident to humanity. In the dark ages, when little was written on medical subjects, many of the epidemics ascribed to plague and typhus fever, were in reality outbreaks of typhoid; at least such now is believed to be the fact. It was not until the early part of the past century, that any differentiation of the latter diseases was attempted, and to the American profession belongs the honor of the achievement, won by two Philadelphia physicians, Gebhardt and Pennock. English and continental workers soon verified their position. But in England, Budd gave the world the largest amount of information as to the real characteristics of the disease, its etiology, symptomatology and clinical aspect, work which has placed him in the front rank among all the students of this subject up to the present time. He demonstrated its infectious nature, that the agent existed in the stools, and that it gained access to the organism through the mouth. Murcheson, also an Englishman, contributed largely to the study of this disease. Coming down to the period of the germ theory, Eberth's discovery demonstrated clearly the infectious microorganism. The vitality of the bacillus is astounding. It has been found to be viable in gallstones after a period of twelve years. In fact, their vitality seems to be almost indefinite when properly protected from sunlight and under otherwise favorable conditions.

Budd and Murcheson worked out the methods of transmission very clearly, the latter stating that it was obtained through food, water, and the like, although it will be remembered that the infecting agent was not to be discovered until many years afterward. The question of infection through the lungs was also con-

sidered by the two men, a point on which there has been considerable difference of opinion at the present day. Wasdin has evolved a theory, and demonstrated its truth to his own satisfaction, as to the pulmonary invasion of the disease. In a recent paper, which I was so fortunate as to hear, he stated that the so-called cycle of twenty-one days is a mistake; that it is a cycle of fourteen days; that the first infection is by way of inspired air, because he has been able to demonstrate the presence of the bacillus in the sputum before it can be found in the stools; that, therefore, the infection of the alimentary tract is secondary to the lung infection, requiring about seven days to reach Peyer's patches after the primary infection of the respiratory tract. He bases his opinion on the fact that he has been able to isolate the bacilli from the sputum, not from the buccal secretion, but from the trachea and lungs, for a week before they appear in the discharges from the bowels. He believes that the cycle is fourteen days; and that when it runs beyond that period, it is due to a reinfection of the intestinal tract from the lungs, which gives it another cycle of fourteen days. He is still working along this line with much promise of effectually establishing his position. His observation was the first to be recorded in the city on the treatment by acetozone at the marine hospital in 1901. He believes it inhabits the growth of all organisms in the intestinal tract. After its use, he found absolutely sterile stools. Many of his cases recovered after a period of fourteen days instead of twenty-one days. They may be autoinfected at the end of a week, causing another run of fourteen days, which terminates both cycles at twenty-one days. They may be reinfected at the end of the second week, causing a double period of fourteen days, or four weeks.

In regard to the symptomatology it is hardly necessary to speak. It was the two physicians before referred to, Gebhardt and Pennock, who pointed out the difference between the rose-colored spots of typhoid and the petechial eruptions of typhus. The latter was an extremely common disease at the time. As a rule, it is a typical case we are called upon to treat in private practice, modified by circumstances and individuality of patient. Aids to the diagnosis are the diazo reaction of the urine, Widal for the blood and, of course, the pathognomonic sign, the bacilli in the dejecta, aids which are too often beyond the reach of the less fortunately situated practitioner. He has to depend upon the sum of his general experience and that sixth sense which becomes greatly developed by long practice. In diet, milk is a sheet anchor. Broths may be depended upon a great deal.

There are one or two things in regard to treatment worthy of special mention. One is that most of the annoying symptoms result, not only from the intoxication resulting from the bacillus of the disease, but also from activities of other organisms, such as the streptococcus, the colon bacillus, and the like, which increase with great rapidity owing to the lowered vitality of the body.

One thing I depend upon is careful attention to the mouth, keeping it constantly rinsed with some good antiseptic solution. I believe that it helps to prevent the development of various germs which find, in decaying parts of food retained in the mouth, a ready nucleus for their luxuriant growth. I also believe in the use of strychnine in this disease. Subcutaneously in fairly large doses, it acts as a true tonic to the nervous system, and if you can tone that up to a high state of efficiency, you will prevent much of the toxemia that would otherwise supervene. I usually begin with 1-30 grain twice a day and increase as indications demand, beginning early in the disease as I would also in the pneumonia of adults. The chaotic state of opinion as to the treatment of typhoid is evidence of indecision with regard to it. As a matter of fact, the patient will not infrequently recover if left alone. I believe too much treatment does much harm: that we can do more by hygiene and general management than by drugs.

Dr. J. H. POTTER.--In presenting the surgical aspect of typhoid, I will refer first to the vitality of the germs. Curiously enough they have been found in abscesses about the gallbladder fourteen and one-half years after recovery from the fever, in bone lesions from four to five months and as late as six years. There is hardly any organ in the body in which they may not be found. Nearly all pathogenic organisms have been found associated with the typhoid bacillus. In some lesions following the disease pure cultures of Eberth's bacillus have been found; in others, none at all. Where they are not found, the characteristics of the local condition are those which attend the activities of the particular germ present. In eighty-four test cases pure cultures were found in sixty-three; the remaining number were either mixed or contained none. This fact also establishes the pathogenic character of the bacillus. At one time it was claimed that the typhoid bacillus could not be classed as a pathogenic organism.

Among the more important surgical aspects of the disease are perforations, lesions of the gallbladder and liver, of bones, abscesses, joint infections, gangrene, and the like. Perhaps the most important is intestinal perforation. It is not necessary to discuss its pathology, for we all know why it occurs. It has been estimated that perforation accounts for about 6 per cent. of the mortality due to typhoid fever. About 71 per cent. of all perforations occur in males. In childhood it is quite rare. It is most frequently seen in about the third or fourth week, but has been recorded anywhere from the first to the sixteenth week. Its most frequent site is in the ileum, next in the colon, and it has been found in the appendix. As a rule, there is only one, but several have been found. Death results, usually, in from one to seven days. The severity of the disease bears no relation to the probability of this accident, as it may occur in the very mildest cases.

The diagnosis is sometimes attended with difficulty. In eighty-six cases, fifty-six had a sudden onset; in fifteen it was gradual;

in five there were no symptoms whatever, the lesion being discovered post-mortem. The usual symptoms are those of shock, sudden pain, vomiting, occasionally accompanied by a marked fall in temperature. One peculiarity of the condition is that the hepatic dulness is not lost, as one might expect it to be from the escape of gas in the bowels. One point which assists diagnosis is the usual absence of marked leucocytosis in typhoid fever; if it rapidly increases it is probable, other symptoms corroborating, there has been a perforation. Death due to septic peritonitis is the usual sequence, the average death-rate in perforations being 95 per cent. When the diagnosis is reasonably certain and the condition of the patient justifies it, operation should be advised. The time selected is of the greatest importance. As a rule, it is better to wait until the patient has rallied from the shock, probably about the second twelve hours. The percentage of recoveries in operative cases is quite fair, the death-rate being reduced from 95 to about 80 per cent.

Another complication which may be regarded as surgical is hepatic abscess. It is a somewhat rare, as well as interesting condition, several unsuspected cases having been discovered post-mortem. Unfortunately, if suspected, the treatment must be largely symptomatic as surgical intervention does not hold out much prospect of recovery. In contradistinction to hepatic abscess, abscess of the gallbladder is comparatively frequent. In at least half the cases of trouble with the gallbladder, the symptoms are not distinctive. When there is pain in the region of the gallbladder, and it is evidently distended, the question of opening it should be seriously considered. When we are reasonably sure that it has been perforated, surgical interference should be instituted at once. The prognosis in these cases is better than in perforation of the intestines, for the reason that the contents are not so toxic as those of the intestines.

The next point for consideration is bone lesions, due either to the typhoid bacillus or the mixed infection, usually the former. These lesions, as a rule, are quite late in their appearance, sometimes requiring months, or even years for their development. It is supposed that some blow or local injury lowering the vitality of the part, affords opportunity for the development of the infection already deposited there. As to the character of lesions, they are varied, such as necrosis, caries, bone abscess, osteomyelitis, exostosis, and the like; in fact, nearly all varieties of the bone lesions may follow. They occur more frequently in males than in females. Practically, any bone of the body may be involved, though those of the lower extremity are the most frequent seat of injury. Next come those of the trunk, especially the ribs, then the upper extremity, and lastly, the head. The symptoms are usually the local ones which you get from mixed infections. The constitutional symptoms are slight in bone lesions due to typhoid bacillus; there may be some slight tenderness or pain, some thick-

ening, and the like, and if not relieved surgically the formation of a sinus of sluggish characteristics may occur. If the infection be mixed, the constitutional symptoms are more marked, and the prognosis more serious accordingly. The treatment of these cases is almost entirely surgical though details are not necessary to enter into here.

Post-typhoid abscesses may occur in almost any organ of the body, and they may be single or multiple. If multiple, the case assumes more of the pyemic type. The infection may be pure or mixed. The symptoms in all such cases are those of abscess formation in the particular part which may be under consideration. The treatment may be surgical. In an abscess of slow development it should be opened under the strictest precaution, lest we add mixed infection to the trouble already existing. Gangrene may follow typhoid fever. It is quite rare, however, and is a late complication. It occurs any time from the fourteenth day to the seventh week. It is caused by either a thrombus at the seat of the trouble or by an embolus. It may be produced by infection attacking the vessel-walls. If the obstruction occurs in an artery, it causes dry gangrene; if in a vein, the moist variety. This condition develops more frequently in males than in females and most frequently in the lower extremities. It also has been found about the nose, ear and trunk.

The treatment of threatened gangrene resolves itself into efforts to promote and maintain circulation by toning up the heart, alternating heat and cold, moderate friction, stimulating liniments, alternating electric current; in short, anything to keep up the blood supply to the threatened area. If the onset cannot be prevented, suitable antiseptic dressings must be applied and the dead tissue removed; if in an extremity we must await the line of demarcation and then operate. Infection of joints may be single or multiple and usually occurs during the period of convalescence. When the inflammation is subacute if the joint be kept at rest, the condition will often subside. However, if this subacute inflammation progresses and the joint becomes filled with fluid, the ligaments may become elongated and give rise to a luxation. Comparatively speaking, it is quite a common occurrence suddenly to find a dislocation of the hip, and unless recognised serious consequences may follow. As a general thing, especially about the hip, the symptoms are not marked. The patient is often more or less apathetic during the period of the disease, so that the joint condition may go on until by some movement you get a dislocation which remains unrecognised for a considerable time. These joint affections occur more commonly under the age of thirty.

As to treatment, if we find a joint filled with fluid which shows no tendency to subside, it should be aspirated and, if pus be found, opened and drained. If it be a pure typhoid infection, the prognosis is quite good. We rarely find hematomas, though they have

been found in the abdominal walls. This affection occurs late in the disease and the treatment is surgical. All cases operated upon have recovered. All that have not been operated upon have died. They should be evacuated and drained. Cerebral complications are brain abscess, meningitis, and thrombus. Cerebral abscess following typhoid is almost invariably fatal. When diagnosis is possible, it is perfectly justifiable to trephine. Meningitis is difficult to diagnosticate because the mental state of the patient, due to the primary disease, is such as to mask the secondary condition. Empyema of lung should be treated surgically, and the same advice applies to purulent pericarditis.

Dr. A. G. BENNETT.—There is practically no literature on typhoid effects on the eye. Personally, I have knowledge of only three cases. Many patients have consulted me in what may be called a pretyphoid state, complaining of headache and distress in the eyes, symptoms that later passed away. We also frequently get patients who, after an attack of typhoid, complain of discomfort in the use of their eyes, while they never had trouble with them before. One can hardly refer to it as a post-typhoid condition, because the same may be seen after any debilitating illness, for instance after parturition. Many women complain of their eyes during the lying-in period. It is a result of a weakened condition which may bring some latent refraction or muscular defect to the surface. It is doubtless due to the peculiar fact that the loss of weight does interfere to a certain extent with the curvature of the cornea; the amount of fat in the orbit being decreased, there is less pressure exerted from behind and a change in the curvature of the cornea results. We may find astigmatism or hypermetropia, which are corrected by regaining the normal weight.

The conditions which may be ascribed directly to the typhoid state are few. The most serious is inflammation of the optic nerve, probably to be followed by atrophy and permanent blindness. Of course, every optic neuritis is not followed by blindness, but it is very liable to occur. I have had one case following typhoid neuritis. Within the past year I have seen a patient several times, in whom there was an embolus in a fine twig of the retinal artery. The area supplied by this twig was totally blind. You can readily understand what would have happened had the embolus lodged in the main artery.

A most interesting typhoid complication was the condition of Chester Cott. It began as a conjunctivitis and gradually invaded the corneal layers, but never got very deep. I believe if we had made a culture we should have found the typhoid bacillus. The cornea was locked in the epithelial layer only and produced a number of ulcerations. So far as my experience goes, it is a unique case. It appears very much like herpetic eruptions of the cornea, but not so painful. I believe it will clear up without leaving any

marks at all, because it is so superficial. So far as the treatment of the condition is concerned, it depends upon the state of the patient. In neuritis, strychnine would be indicated. I doubt whether the oculist would have more to do than to make a diagnosis; there is practically nothing to do in atrophy.

Dr. F. C. BUSCH.—I am expected to speak of the stomach in typhoid fever. I suppose that means during and after typhoid. In this disease, the stomach is less liable to have anything the matter with it than any other organ in the body, because the period of disease is a period of rest for the stomach. There are a few gastric complications which rarely occur in typhoid; nausea and vomiting are the most common, and may occur early or late. When early, the cause is rather hard to state, unless it be a reflex result of the toxemia. When it occurs late it is more likely to be due to dietetic errors, irritating medicine, or the result of peritonitis following perforation. Most rarely it is due to typhoid ulcer in the stomach itself.

During the fever there may be a diminution in, or complete absence of, secretion of hydrochloric acid. Investigations on this subject have led to various results. It was found by one observer that diminution or complete absence occurred in nearly all his cases. Another found that free hydrochloric acid was present during continuous fever and transitory high temperature. Others state that, as a rule, the secretion of pepsin is not affected. However, all these results may be found in any continuous fever and are not the result of typhoid per se. As a sequela there may be chronic gastric catarrh with dilatation, a result, too, of other debilitating infectious diseases. The dilatation is due to loss of tone and motor power, as a result of the general weakness and toxemia. Then, typhoid convalescents have a ravenous appetite and when allowed to eat without supervision, are likely to eat to excess, thus inducing this condition of chronic catarrh and dilatation.

Dr. J. A. GIBSON.—The part that the nervous system plays in this disease may be intimated by the fact that the Germans call it "nervenfieber." The most common symptoms in connection with the nervous system are headache and insomnia. While the headache is one of the earliest symptoms, the insomnia is the most troublesome. Paralysis of the higher centers occurs, although not very frequently. Delirium is another common symptom and it is generally most marked at night. It may be of different varieties: quiet, in which the patient knows that he has delusions, but cannot help seeing them, though aware all the time that the phenomena are unreal; they may be violent or maniacal, and it is to be remembered that suicidal tendencies are quite common in severe types; in alcoholics, delirium tremens is a common complication, usually occurring about the second week. In females we see a certain delusion of presentation, which is quite common.

With regard to diagnosis, the delirium may be confounded with that due to meningitis, a disease hard to differentiate, and, as one of the previous speakers remarked, we often find, on post-mortem, that there may have been a meningitis also. In children, convulsions are another complication. I came across one authority, who mentions that the knee reflexes are frequently exaggerated in this disease, which does not indicate anything in particular. He also stated that where emaciation was very marked, you might get idiopathic muscular contractures. Of sequelæ several have been mentioned by previous speakers. Mental disease, loss of memory, impairment of intellectual faculties are noted. Aphasia occurs, as do serious cases of neurasthenia. These may be cerebral, cerebrospinal, visual, or sympathetic.

A number of localised pains are liable to follow typhoid, particularly in the soles of the feet and toes, slight pressure causing great pain. It is probably due to a local neuritis from tissue poverty and faulty nutrition. Disseminated sclerosis is said to occur quite frequently, as well as poliomyelitis. I saw one case where the symptoms closely resembled those of bulbar paralysis. The patient had difficulty in speaking, and in executing the finer movements of the fingers. It terminated fatally. Paralysis of the cranial nerves is rare. Hearing is commonly affected, as explained by Dr. Cott. Peripheral neuritis has been noted quite frequently.

Dr. THOMPSON inquired as to the cause of the head symptoms. Dr. Gibson stated that the bacilli had been found in the cerebrospinal fluids; that they are probably due to a localised meningitis.

Dr. DIGNEN suggested the thought, in connection with the discussions of Drs. Thompson and Potter, that possibly the body contained supplies of the bacillus all the time and required only a suitable opportunity to begin its activities.

Prostration of the Circulation.

By LOUIS FAUGERES BISHOP, A. M., M. D., New York.

THIS term is used as synonymous in reference to the circulatory system with neurasthenia in relation to the nervous system. Neurasthenia is undoubtedly founded upon a malnutrition or an exhausted vitality of nervous tissue. Prostration of the circulation is founded upon the corresponding elements, but as the heart and bloodvessels are much more open to direct examination than the nerves, there are signs as well as symptoms. As in neurasthenia both the brain and the peripheral nerves participate in the disease, so in prostration of the circulation the

heart and bloodvessels are involved. Neurasthenia and prostration of the circulation are two conditions that have many correlations. In neurasthenia there is always a certain amount of vasomotor disturbance, though there are many cases in which the circulation is entirely normal.

In prostration of the circulation there is often much depression, but disturbances of sensation have a real foundation in alterations of the blood supply, and there are many cases in which there is not the slightest touch of neurasthenia.

I have suggested the name, Prostration of the circulation, to cover those cases in which the terms myocarditis and arterial degeneration are too harsh, just as we would not like to speak of neurasthenia as insanity. We have for a long time needed a word to cover those cases which present disturbance of function, and which are perfectly capable of complete recovery, though as often as not they go on to the manifestation of organic disease.

The following case which I saw recently will illustrate the point I wish to make. The case was that of a woman who had worked very hard all her life, had become run down and began to find that it was difficult for her to carry on her occupation. She presented the appearance of health; there were no evidences of kidney disease and no history of dissipation. She complained of some shortness of breath on exertion, particularly when there was any sudden demand upon her muscular system. She was not in the least neurasthenic, for these conditions were perfectly real in their existence. The arterial pulse was soft and compressible; her heart sounds were feeble and there was a soft systolic murmur at the apex.

It seemed to me a simple case of circulatory prostration and one that was capable of complete recovery by a suitable course of treatment. It is not easy to describe the differentiation of such a case from a case of real myocardial degeneration, or a case of circulatory disease in which the kidneys may eventually be the principal sufferers. However, there is this about it—namely, that in myocarditis, irregularity of force and rhythm are a very constant symptom, and in commencing arterial degeneration careful search is made to discover some signs of irregularity of cerebral circulation. Cases of prostration of the circulation show marked hepatic symptoms, principally due to the stagnation of the circulation in the liver. In other words, in simple prostration of the circulation the blood current is feeble but regular. In myocarditis and arterial degeneration it is irregular.

SOCIETY PROCEEDINGS.

Special Meeting of the New York State Medical Association.

Held at the New York Academy of Medicine, March 21, 1904.

From New York State Journal of Medicine, April, 1904.

THE meeting was called to order at 8.35 p. m., the president, Dr. William H. Thornton, of Buffalo, in the chair. The secretary, Dr. Guy Davenport Lombard, stated that the purpose for which we meet this evening is in answer to a request addressed to the president, and is as follows:

NEW YORK, Feb. 16, 1904.

DR. WILLIAM H. THORNTON, President, The New York State Medical Association, 572 Niagara Street, Buffalo, N. Y.

Dear Doctor—We, the undersigned fellows of The New York State Medical Association, request that you call a special meeting of all the members of the association, to be held at the Academy of Medicine, 17 West 43d street, New York City, on March 21, 1904, at 8 p. m. The object of the meeting is to take action upon the following:

"Resolved, That the report of the joint committee of conference be accepted, and that the proposed agreement for the consolidation of the Medical Society of the State of New York and The New York State Medical Association be, and the same is, hereby approved, and the president of the association is hereby authorised and directed to execute the same in the name and behalf of the association, and the secretary is hereby authorised and directed to affix the corporate seal thereto; and be it further

"Resolved, That the committee of the association heretofore appointed for the purpose of bringing about the consolidation, namely, Dr. E. Eliot Harris, Dr. Julius C. Bierwirth, Dr. Alexander Lambert, Dr. Parker Syms and Dr. Wisner R. Townsend, be, and they are, hereby continued as such committee, with full power and authority to do whatever may be necessary to carry the agreement into effect."

And also to ask the county medical associations in affiliation with The New York State Medical Association to ratify the agreement.

Very truly,

(Signed),

E. ELIOT HARRIS,
PARKER SYMS,
J. C. BIERWIRTH,
ALEXANDER LAMBERT,
WISNER R. TOWNSEND,

JOS. D. BRYANT,
CHARLES G. STOCKTON,
C. C. FREDERICK,
ALLEN A. JONES,
And 29 others.

Dr. Bryant rose to offer a resolution, but at the request of the president it was held over until after the reading of the report of the joint committee of conference by Dr. E. Eliot Harris, chairman of the committee on conference of The New York State Medical Association. Dr. Harris stated that as his report was very lengthy the reading might be suspended at any time if the members so requested. The report of the committee is as follows:

To the Council Fellows and Members of The New York State Medical Association:

Your committee appointed and empowered to confer and unite with a committee of the Medical Society of the State of New York, for the purpose of forming a union of the two state medical organisations, respectfully submits the following report:

The first communication the committee received was from your secretary.

DR. E. ELIOT HARRIS, Chairman, Committee on Conference, 33 West 93d street, New York.

Dear Doctor Harris—I have the honor to inform you that at a meeting of the counsel and fellows of The New York State Medical Association, held at the Academy of Medicine, on October 1, 1903, you were appointed chairman of the committee on conference, by the president, with power to do whatever is necessary and expedient to bring about a union of The New York State Medical Association and the Medical Society of the State of New York in a just and equitable way.

I am enclosing herewith the text and preamble and resolution, following which your appointment took place.

Yours very sincerely,

GUY DAVENPORT LOMBARD,
Secretary.

The following are the resolutions:

WHEREAS, The members of The New York State Medical Association desire a union of the medical profession of the state of New York, and

WHEREAS, It is deemed expedient for the attainment of this purpose, to make further effort to bring together The New York State Medical Association and the Medical Society of the State of New York.

Resolved, That a committee of five be appointed by the chair, and said committee is hereby empowered to do whatever is necessary and expedient to bring about such a union in a just and equitable manner.

Resolved, That the committee so empowered may confer, coöperate and unite with a committee of the Medical Society of the State of New York, for the purpose of forming said union of the two state medical organisations.

Resolved, That a copy of these resolutions be transmitted to the secretary of the Medical Society of the State of New York, with a request that their conference committee be granted similar power.

The committee appointed in accordance with this resolution: E. Eliot Harris, chairman; Julius C. Bierwirth, Alexander Lambert, Parker Syms, Wisner R. Townsend.

OFFICE OF THE SECRETARY OF THE MEDICAL SOCIETY OF THE
STATE OF NEW YORK.

ALBANY, N. Y., October 14, 1903.

GUY DAVENPORT LOMBARD, Secretary, The New York State Medical Association.

Dear Sir—At a duly called meeting of the Medical Society of the State of New York, held in the city of New York, on October 13, 1903, the following was adopted unanimously:

WHEREAS, The New York State Medical Association, at a recent special meeting, duly assembled, has by unanimous vote appointed a committee with full power to meet a similar committee of the Medical Society of the State of New York, to arrange for the unification of the two organisations under the corporate name of the Medical Society of the State of New York, therefore be it

Resolved, That the committee on conference of the Medical Society of the State of New York, already appointed, be given powers equal to and commensurate with those granted the committee created by The New York State Medical Association, for the purpose of unifying the two state medical bodies in the Medical Society of the State of New York.

I have the honor to transmit this to you, as the action of this society, pursuant to that of the association, of which you are secretary, referred to in the preamble of the resolution.

Respectfully,

FREDERIC C. CURTIS,
Secretary.

The chairmen of the committees on conference arranged for the first joint meeting, which was held at the Academy of Medicine, on the afternoon and evening of October 30, 1903. At this meeting the joint committee on conference was organised by electing Dr. A. Jacobi chairman and Dr. Wisner R. Townsend secretary. A draft of a bill to be presented to the legislature

was read and adopted. A sub-committee of three, consisting of Dr. A. Jacobi, Dr. E. Eliot Harris and Dr. George R. Fowler, was empowered to employ legal counsel to arrange the draft of the proposed bill, for the consolidation of the two state medical bodies, in proper legal form, to be introduced in the legislature of 1904. The sub-committee unanimously agreed to select as counsel, Mr. Howard Van Sinderen, of New York, a lawyer well known in the medical profession, he being the counsel of the New York Academy of Medicine.

Mr. Van Sinderen framed in legal form a draft of the proposed bill, "Entitled An Act" for the consolidation of The New York State Medical Association and the Medical Society of the State of New York, and accompanied the proposed bill with a written opinion, attacking its constitutionality, on the ground that mandatory legislation affecting the vested rights of the members of the two state medical bodies was illegal.

Several members of the joint committee on conference secured opinions from constitutional lawyers in this state, and they all confirmed Mr. Van Sinderen's opinion as to the unconstitutionality of the proposed mandatory legislation. Since mandatory legislation was declared illegal, Mr. Van Sinderen suggested a plan of securing permissive legislation, and the sub-committee, with his aid, laid before the joint conference committee a bill to be introduced into the legislature, entitled, "An Act, to authorise the consolidation of the Medical Society of the State of New York and The New York State Medical Association," which was adopted unanimously by the joint conference committee, at a meeting held at the New York Academy of Medicine on January 5, 1904. This so-called permissive act was passed by both houses of the legislature, and was signed by the Governor on January 21, 1904. (Then followed the unanimous report of the committee, which is like that presented to the Medical Society of the State of New York, January 26, 1904.)

Respectfully submitted,

E. ELIOT HARRIS, Chairman;
JULIUS C. BIERWIRTH,
ALEXANDER LAMBERT,
PARKER SYMS,
WISNER R. TOWNSEND.

After the report of the joint committee of conference had been partially read, Dr. Bryant moved that the reading be discontinued, on the ground that the report had already been in the hands of every member of the association, and the members were therefore familiar with it. Carried. Dr. Ferguson then asked if in the report there were reasons given for the action advised, to which Dr. Harris answered that it was the official report of the "act" which had passed the legislature, and was the constitu-

tion and by-laws of The New York State Medical Association. Dr. Bryant then offered the following resolution:

"Resolved, That the report of the joint committee of conference be accepted, and that the proposed agreement for the consolidation of the Medical Society of the State of New York and The New York State Medical Association be and the same is hereby approved, and the president of the association is hereby authorised and directed to execute the same in the name and behalf of the association, and the secretary is hereby authorised and directed to affix the corporate seal thereto; and be it further

"Resolved, That the committee of the association heretofore appointed for the purpose of bringing about the consolidation—namely, Drs. E. Eliot Harris, Julius C. Bierwirth, Alexander Lambert, Parker Syms and Wisner R. Townsend, be and they are hereby continued as such committee, with full power and authority to do whatever may be necessary to carry the agreement into effect."

The president, Dr. Thornton, then stated that in considering these questions it should be borne in mind that the committee appointed by President Wiggin, was one which, perhaps as well as any committee could have done, had commanded the respect and confidence of the entire association. The report of the joint committee of conference, as it had been partially read by the chairman of the committee on conference of the state association, represents in a very small degree the tremendous amount of work involved in the consideration of these questions, which has required a great sacrifice of time and patience, courtesy and energy on the part of the members of the joint committee. A matter of such great importance as the question of reconciling so many diverse interests, cannot be possibly accomplished without concessions and sacrifices by both parties, and I feel that the members of the committee on conference will have represented the interests of The New York State Medical Association, in that they have been able to carry out as far as possible the wishes of the association. In considering these questions I also feel that we should consider not only what is for our present interests, not our feelings for the present time, but should take into consideration the question of the future welfare of the medical profession of the state of New York, and look upon this action, not as it appears for the present, but as it will appear in future years. The question of adoption of the resolutions is now open for discussion by the members of the association.

Dr. E. D. Ferguson, of Troy, said that he would like to have any one favoring the report say whether the plan of union is for the best interests of the association, and if it carried out the

statement of the association in the resolution, that the plan of union should be a "just and equitable" one for the association would be true. The question was not answered. I have a word to say if no one wishes to speak, and I trust that the time will be given to me to say it by the association.

It is twenty-one years that I have worked for The New York State Medical Association, and I feel that I have the right to ask for a few minutes—ten, fifteen, possibly twenty. I am not here tonight, Mr. Chairman, to vote against the action of this committee, for I know what an awkward position would be created by the rejection of their report, but I am here to express my sentiments, and not mine only, but those of a large majority of the association, that we have not been justly treated, and in giving up what this association has stood for in this movement toward a union, we know that we have been snared. The American Medical Association years ago let the old members of the state society come and read their papers, if they were so inclined, but when the line was drawn at the meeting of the American Medical Association at Denver, and it was said that no one could be in proper affiliation from their state without being a member of the association representing the American Medical Association in that state, from that moment the membership of the association in the state of New York increased, and from that moment a desire to get into the American Medical Association, in some form, shape or fashion, was constantly being pressed. There was one door that was open, one door that was honorable, and that door was through membership in The New York State Medical Association. Many men came and took their membership and took it honestly. Then there began to be a struggle, I can see it now, but the state association stood squarely upon its basis, and the Medical Society of the State of New York came and asked for union. They did this over two years ago. We did not ask for it, but we were willing to give it. And after the meeting at Saratoga, the committee of the Medical Society of the State of New York expressed their willingness to accept the conditions as they were, but they did not carry it out. When our committee was first appointed I was especially urged not to have upon the committee any of the old men, that there should be new blood in the committee. There were no old warriors on our committee, but the committee of the Medical Society of the State of New York was made of ex-presidents and old members, and I did not like it when I heard it. At the meeting at New Orleans there was a movement made for a new code of ethics; God knows we did not need it; it was strong enough as it was for any honest man, and no one can make one strong enough for a dishonest one, and now the code is not part of the union.

What are the terms of union? They are the plan of organization as planned by the American Medical Association. It is not

the original plan of organisation of The New York State Medical Association; it may not be the plan that is best for any one; it is not proved yet that the bodies will not be controlled by cliques. We have simply yielded everything, and I would ask the committee the question if their plan is just and equitable to the state association? And I wish to say that from the very bottom of my heart I feel the injustice of it. I feel that The New York State Medical Association has simply been bereft of everything that it stood for. The committee had the power to do this, it is true, but if the committee had asked for different terms of union those terms would have been granted, with more honor to us, and they know it.

And now to the committee itself. For this betrayal of the association, I am impelled to utter the words that, to the best of my memory, Shakespeare put in the mouth of the outraged queen:

"Thou little valiant, great in villainy!
 Thou ever strong upon the stronger side!
 Thou Fortune's champion, that dost never fight
 But when her humorous ladyship is by
 To teach thee safety! thou art perjured, too,
 And sooth'st up greatness; What a fool art thou
 A ramping fool; to brag and stamp and swear
 Upon my party! Thou cold-blooded slave,
 Hast thou not spoke like thunder on my side?
 Been sworn my soldier? Bidding me depend upon
 Thy stars, thy fortune and thy strength?
 And dost thou now fall over to my foes?
 Thou wear a lion's hide! doff it for shame,
 And hang a calf's skin on those recreant limbs."

I am done. My association work is finished. I cannot say good-bye to you, the word means too much, I cannot say farewell for the association is about to die, and I am even debarred the thin Gallicism of *au revoir*. Nothing is left to say, I go.

Dr. Bryant then moved that the county associations in affiliation with the state association be requested to ratify the action of the state association. Both resolutions were unanimously carried.

Dr. Thornton then acknowledged with thanks the courtesy of the New York County Medical Association for its kindness, and moved that if there was no further business before the association that the meeting be adjourned.

Buffalo Academy of Medicine.

Section on Medicine, February 9, 1904.

REPORTED BY WM. IRVING THORNTON, M. D., Secretary.

The regular meeting of the medical section was held at the Academy Rooms, Public Library Building, on Tuesday evening, February 9, 1904. The meeting was called to order at 9.15

o'clock, by the chairman, Dr. A. W. HURD. The minutes of the last meeting were read and approved.

The paper of the evening was read by Dr. ALLEN A. JONES, entitled,

TETANY AND ITS RELATION TO GASTRIC DISEASES.

The condition is most frequently present in children of the ages of four and five. The consensus of opinion at the present time is that tetany is due to a toxemia, probably gastrointestinal in origin. Poor hygiene, malnutrition and pregnancy are predisposing factors. It may occur as the earliest symptom of an acute infectious disease, as scarlet fever and cholera. It may be a manifestation of hysteria. In apparently infectious form it occurs occasionally in young men.

The most common pathological findings are obstruction of the pylorus, due to cicatrization following a gastric ulcer; dilated stomach and hyperchlorhydria, or retained secretion. The hypersecretion causes hyperplasia of the gastric mucous membrane, which is followed by a weakening of the gastric walls. In one case of the writer's, there was obstruction of the pylorus, due to adhesions with the gallbladder. The treatment of these cases is surgical, pyloroplasty or gastroenterostomy being the most advisable. In the writer's opinion pyloroplasty has given better results than gastroenterostomy, provided a large enough opening is made in the former.

Dr. EDWARD MCGUIRE in discussing the paper stated that by surgeons the accepted operation was gastroenterostomy, as tetany may recur after a pyloroplasty.

Dr. COLTON spoke of an infant nine months old which had been fed on simply oatmeal water for several months. The child was taken with tonic spasm of the extremities. On the third day it spread upward, became general and caused the death of the infant. He believed that this case was a good illustration of the casual relation of malnutrition to tetany.

Dr. C. S. JONES reported a case of tetany in a woman 50 years of age.

Dr. HURD stated that because of the definite symptom complex of this disease, he believed that it will prove to be of an infectious nature.

Members present, 16.

Meeting adjourned at 10.10 p. m.

Section on Medicine, March 8, 1904.

REPORTED BY WM. IRVING THORNTON, M. D.

The regular meeting of the medical section was held in the Academy Room, Public Library Building, Tuesday evening, March 8, 1904. The meeting was called to order by the chairman, Dr. A. W. HURD, at 8.50 o'clock. The minutes of the last meeting were read and approved.

The paper of the evening was by Dr. HENRY R. HOPKINS, entitled,

MALIGNANT ENDOCARDITIS OF THE RIGHT HEART.

This condition is also known by the terms, ulcerative, diphtheritic, and myotic endocarditis. The term malignant was preferred by Dr. Pepper. The right-sided form is much less frequent than the left. In 204 cases of Dr. Osler's it occurred fourteen times less frequently. The cause of this disproportion is not definitely known. The higher blood pressure of the left side is supposed to make its valves more vulnerable.

The right-sided form differs from the left in presence of pneumonic symptoms and absence of brain and kidney symptoms. The essayist reported two cases with the findings at their autopsies.

Dr. CHARLES G. STOCKTON in opening the discussion of the paper said he believed that the increased blood pressure in the left heart accounted, in part, for the more frequent occurrence of malignant endocarditis, but the fact that this condition is most frequently grafted upon a chronic valvulitis, which is usually left-sided, and the fact that certain organisms grow better in arterial than venous blood, accounts largely for the preponderance of left over right-sided forms. In concluding his remarks he reported three cases.

Dr. BLAAUW stated that in these conditions changes in the retina are to be observed, particularly hemorrhages.

Dr. BENNETT spoke of a case where antistreptococcic serum had been used, with apparent relief of the symptoms, the patient, however, dying of embolism in the brain.

The paper was also discussed by Drs. DUNHAM, LYON and HURD.

Dr. HOPKINS in closing stated that he had used collargol in two cases with no result.

Fellows present, 27.

Meeting adjourned at 10.10 p. m.

Medical Society of the County of Erie.*Special Meeting held April 9, 1904.*

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

A special meeting of the Medical Society of the County of Erie was held at the rooms of the Buffalo Society of Natural Sciences in the Public Library Building, Saturday, April 9, 1904, at 4 p. m., for the purpose of taking action on the report of the joint committee of conference, consolidating the Medical Society of the State of New York and the New York State Medical Association.

The president, Dr. WILLIAM C. KRAUSS of Buffalo, took the chair at 4.15 p. m., and, in the absence of the regular secretary, appointed Dr. William G. Ring secretary pro tempore. The president then stated the object of the meeting as recited above. He said it is held pursuant to a notice from the secretary of the Medical Society of the State of New York, which he directed the secretary to read, and which was done.

Dr. WILLIAM WARREN POTTER then offered the following preamble and resolutions:

WHEREAS, Duly appointed committees of conference on the part of the Medical Society of the State of New York and of the New York State Medical Association have agreed upon a plan of union of these two bodies and of their constituent societies and associations; and,

WHEREAS, The two original contracting parties to the conference—namely, the society and the association, have unanimously ratified and confirmed the report of the committees; therefore, be it

Resolved, That the Medical Society of the County of Erie in special session assembled this 9th day of April, 1904, hereby approves the action of the said committees and joins in accepting the conditions of the aforesaid agreement so far as they may apply to this society; and, furthermore, this society agrees on its part to do whatever may be legally necessary to complete the consolidation and make it effective, and the Medical Society of the County of Erie hereby waives notification of an application to court for an order consolidating said corporations pursuant to the terms of said agreement, and hereby consents to the entry of such an order without notice; and be it further

Resolved, That the secretary of this meeting be and he is hereby authorised and directed to send a copy of these resolutions, duly certified by the president and secretary of the meeting, to the secretary of the Medical Society of the State of New York,

and to execute and deliver any and all waivers of notice of an application for such order as the court may require.

In moving their adoption Dr. Potter said that, in view of the probability that all present were familiar with the action already taken by the two state medical bodies at interest, it would be quite unnecessary for him to enter into a detailed explanation of the subject. A schism that had existed for twenty-two years was about to pass, only a few formal acts being necessary to wipe it out.

Dr. DELANCEY ROCHESTER seconded the motion of Dr. Potter in a brief but well expressed speech, during the course of which he stated that he had been an advocate of the consolidation movement in and out of season, among the members of both bodies, sometimes to the irritation of his association colleagues. He was glad to note the near accomplishment of this important procedure, which should be gratifying to every member of the medical profession in the state of New York.

Further remarks in the same general spirit were made by Drs. J. B. Coakley, W. C. Callanan and others. The motion was then unanimously adopted and the meeting was adjourned.

New York Odontological Society

(From, Secretary's Report.)

AT THE meeting of the New York Odontological Society, held at the Academy of Medicine, New York, Tuesday evening, April 19, 1904, EUSTACE H. GANE, Ph. C., read a paper entitled,

DENTAL APPLICATIONS OF SOME NEW OXYGEN COMPOUNDS.

After a brief mention of the value of solutions of hydrogen dioxide to the dentist, the lecturer drew attention to a number of new compounds which readily liberated oxygen. The first of these to be introduced was sodium dioxide which was valuable because it had a saponifying action in addition to its germicidal properties. Its caustic properties and the danger in handling it were serious objections to its general use. Attention was then drawn to the fact that hydrogen dioxide would unite with certain saline substances forming a number of interesting compounds, the most valuable of which are the compounds with carbonate of soda and borax. The first compound would do all that sodium dioxide

would do, and did not have the disadvantages of the latter. The borax compound was milder in its action and useful where a slow oxidising action was required. These compounds were at present in the experimental stage, but promised to be of value to the physician as well as the dentist.

The author then pointed out that more and more attention was being paid to mouth hygiene. Dr. William Hunter had informed us that many disorders of the stomach may be attributed to the irritation caused by swallowed pus. This may happen not only in cases of pyorrhea alveolaris, but also from diseases of the gums, stomatitis due to septic plates, and to the bridge and crown work now so much in vogue. More dangerous still are pus organisms associated with dental caries; no pus organisms being so virulent as those grown in necrosed bone. Given the necessary conditions, diminished resistance on the part of the tissues, the pus organisms taken in by the mouth may be disease-producing.

The problem, then, of the oral therapist was to discover some means of keeping the mouth in a clean condition. Tooth powders heretofore manufactured were of little value, as no antiseptic could be introduced in sufficiently large amount to do the necessary work without injury to the soft tissues, while liquid dentifrices were weak in cleansing properties and chiefly served by producing a cooling effect, to give a false impression of cleanliness. Here was the point where the chemist could come to the dentist's and physician's aid. Among the new oxygen compounds was one which had been found available in the highest degree for the purposes of mouth sterilisation. This was the calcium dioxide which, thanks to the development of the electrical industries at Niagara, could now be produced on a commercial scale. This chemical added to a tooth powder base was found to give the powder properties hitherto thought impossible of attainment. In contact with the mouth fluids oxygen was liberated with the formation of milk of lime, an antacid as well as a germicidal action being thus attained. Moreover, in incipient dental caries where there were local acid areas this acid decomposed the calcium dioxide, liberating hydrogen dioxide at exactly the point where its germicidal properties were most needed.

By this means it was now possible to give to the patient a simple means not only of preserving the teeth from decay, but of preventing, to a large extent, the ingress of those pathogenic bacteria which frequently found a suitable field of development in the human mouth. An added advantage was the avoidance of the necessity of using a mouth wash as well as a tooth powder, something which it was very difficult to induce the average person to do. The paper was illustrated with chemical experiments.

SELECTION.

The Increase in Cancer.

(Editorial in *New York Tribune*, April 16, 1904.)

Dr. Roswell Park of Buffalo, while delivering an address in Berlin this week, made an allusion to the prevalence of cancer which has either been misunderstood or inaccurately reported. He is represented as having said that cancer is almost as common in the United States as tuberculosis. This is a matter to which Dr. Park has given much attention for years, and he has made a special study of the conditions in New York State, which is supposed to lie in what is called the "cancer belt." Hence, it does not seem credible that he intended to convey the impression which one would derive from the language imputed to him.

It appears from the statistics of the State Board of Health for 1903, for instance, that the total number of deaths last year from cancer in New York was 5,456, while the mortality was considerably greater from each of seven other diseases, not counting accidents, violence and unclassified maladies. "Acute respiratory disorders," among which pneumonia doubtless holds the chief place, are credited with 17,339 deaths, and tuberculosis with 13,194. From the same source of information, however, one learns that there has been comparatively little fluctuation of late in the havoc from most of these causes, but that cancer is on the increase.

Deaths in 1903 due to cancer exceeded those of 1902 by nearly 500, and exceeded the average for the previous five years by 684. These figures show, therefore, that the rise in mortality from cancer, to which Dr. Park called attention in the pages of the medical papers five years ago, still continues. He then predicted that if it was maintained long enough cancer would rival tuberculosis. That time has not yet arrived, but the steady increase for more than a decade certainly justifies great uneasiness. After all, it is the ratio that tells the story.

Corroborative testimony was offered by Dr. Frank G. Clemow, in his *Geography of Disease*, which appeared last year. He was disposed to think that to a limited extent, possibly, the gain was apparent rather than real. In some measure it might perhaps be attributed to differences in diagnosis and registration between earlier and later periods, but it did not seem probable to him that any such explanation would fully account for the increase. The phenomenon has been observed in several European countries. It was especially notable in the United Kingdom. Still, the most

conspicuous rise, he declared, was on this side of the Atlantic. As to the main fact, therefore, there can be little question. It has been recognised too long and too widely to admit of mistake.

Medical men have at least two reasons for regarding this situation with peculiar dismay. No altogether satisfactory method of treatment for cancer has yet been found. In a few cases Röntgen rays have afforded relief. Perhaps radium will some day prove helpful. Surgery is the most efficacious resource, but it is not always practicable, nor does it invariably preclude a return of the trouble. The wisest and most skilful members of the profession are almost powerless to fight cancer. Again, the exact cause of this disease—or, to speak more accurately, this group of diseases—has not yet been determined. Every few months the alleged discovery of the cancer germ is announced. The men who have been engaged in the hunt and who have thought that they had achieved success have often had a high standing. One of them, Dr. Gaylord, is a fellow townsman of Dr. Park. Another is Dr. Schmidt, one of the advisers of the Emperor of Germany. In none of these instances, however, has the demonstration been complete and convincing. An organism may be found which is almost always an accompaniment of the diseased tissue under examination. It will not meet all the logical requirements prescribed long ago by Koch, though, unless it be separated from the human system, independently cultivated and then employed to transmit disease to a healthy animal. As final proof of that kind is still lacking, it is too soon to place confidence in any of these claims. Eventually, it is reasonable to hope, the mysteries of cancer will be revealed and an effective method of warfare will be found, but today the doctors are sadly in the dark.

ABSTRACT.

On Urotropin.

VINDEVOGEL, Laureate of the University of Brussels, 1897-1899, (*Annals of the Royal Society of the Medical and Natural Sciences at Brussels*, Vol. XI., Part 2, 1902,) aimed at determining whether and in what manner urotropin is decomposed in the organism into ammonium and formalin. The first tests which he made showed that the decomposition of urotropin is slight and slow in neutral cold solution (68 to 77° F.), and is more active when the temperature is raised, especially on ebullition. It is also more active in acid solution, even if cold.

From these facts it would seem that urotropin, when taken by

mouth during digestion, is when it reaches the stomach in conditions favorable for the liberation of formalin, being in an acid medium at a temperature of 99.5° F. This is easily avoided, however, by administering the drug upon an empty stomach. Urotropin is then absorbed and circulated in the fluids of the body, the blood, lymph, and all alkaline or at least neutral media. It does not seem probable that formalin in quantity sufficient to give a reaction will be set free in them. But when the urotropin has been eliminated by the kidneys and mixes with the urine in the bladder, it is in an acid medium at a temperature of about 99.5° F., i. e., under conditions favorable for its decomposition and the liberation of formalin. It should therefore circulate in the blood as urotropin and should liberate formalin only after reaching the urinary bladder.

These considerations were borne out by animal experiments. When urotropin is administered subcutaneously to guinea-pigs, rabbits and dogs, urotropin, but no formaldehyde, is found in the blood. Formalin is found in the urine of most of these cases, but no satisfactory explanation was found for the exceptions to this rule. In healthy human beings the acidity of the urine is always markedly increased by urotropin. Formaldehyde is found in most of their urines, but here again there is no explanation for the exceptions.

When the urine is rapidly voided after excretion, it does not contain formalin. The demonstration of formalin is, however, easy, when the urine has remained three hours or more in the bladder. Hence urotropin in man is absorbed and circulates unchanged. It is eliminated by the kidneys unchanged, and the formalin is set free only in the bladder. From this last conclusion it follows that urotropin may be used to set free formalin in the urine, and that it will be found useful whenever it is necessary to effect vesical antisepsis.

Vindevogel then records 10 cases, in all of which the acidity of the urine, when of normal reaction, was markedly increased, and neutral and alkaline urines were acidified. Especially in chronic cystitis accompanying prostatic affections urotropin gave good results; there was a manifest amelioration of the most troublesome symptoms, the dysuria, pollakiuria, and the like. It always effects a rapid improvement followed by a complete cure in phosphaturia; success is more perfect, rapid and permanent than under the mineral acid treatment. Vindevogel believes also that it should render good service in cases of uric acid calculi. By keeping the urine acid and maintaining the phosphates in solution, it should prevent the increase in size of the uric acid calculus from the precipitation on it of phosphates.

CORRESPONDENCE.

Letter from Berlin.

DR. ROSWELL PARK GIVES SOME IMPRESSIONS OF THE RECENT CONGRESS OF GERMAN SURGEONS.

Editor Buffalo Medical Journal:

SIR—It has occurred to me that a brief account of the meeting of the German "Gesellschaft für Chirurgie," or Surgical Association, whose sessions, extending over four days, have just been completed, might be of some passing interest to your readers. This is the thirty-third annual meeting, therefore it will be seen that it is an older institution than our American Surgical Association. It is, however, in one respect, less select, since its membership is unlimited, and it is open to all those who confine themselves to surgical work; whereas the American society is limited, at present, to one hundred and twenty-five, it being the intent that only those who have already made their mark in surgery shall be considered as candidates. There are advantages in each way of doing things. For my own part I have always thought that a judiciously selected but unlimited membership list brings the greatest good to the greatest number. In this matter, however, I have so far been in the minority, though I have urged the "open door" policy.

The founders of the German society were Langenbeck, Billroth, Volkmann, Bruns, Bardeleben, Simon, Gurlt, Thiersch and Esmarch, and a picture of these men, whom we all delight to honor, hangs in the surgical clinic of the General Hospital. I have had the honor of being one of the four or five regular American members for a number of years, but have attended very few meetings. These are held during the week following Easter, which is vacation time in all the German universities, so that a large gathering is always possible. There are some four hundred and fifty members, and the program for the meeting included about one hundred and fifty papers. Thus it will appear to be an exceedingly active body of men. All of the surgeons of whom we ever hear belong to it, as well as many others.

Meetings are always held in Berlin, since here the society owns its own home. It stands on the grounds of the University Surgical Clinic; has an auditorium that will seat nearly five hundred, a very valuable library, numerous portraits, a museum, and all that can ever be needed for its purposes. The building, not including the land, cost one hundred and twenty-five thousand

dollars, of which amount the grandmother of the present Kaiser contributed a very generous amount. Here meet numerous local and more national medical societies; the Langenbeck House, as it is called, is a sort of national surgeons' headquarters, somewhat corresponding to the Royal College of Surgeons in London; only the society has nothing to do with licensing or governing the practice of surgery.

Here, too, met during the past week the German Association of Orthopedic Surgeons, the meeting lasting only one day, under the presidency, this year, of Dr. Heusner, of Barmen. They had a program replete with interest, the principal subject for discussion being contractures of joints, while congenital dislocations, especially of the hip, were treated of by a number of writers. Lorenz, of pseudo-American fame, was not present. I was not a constant attendant, but I could not gather that *his* method of reducing congenitally displaced hips has won any great esteem over here. To be sure, however, the newspapers here are not generally on his side; neither is he taken so very seriously—at least not favorably—by the men here with whom I have talked.

To this orthopedic association belong about a hundred members. I note that among these the principal *operating* orthopedists belong to the surgical association, while those who work mainly or entirely with massage, apparatus and gymnastics, form a sort of group by themselves, as in the American Orthopedic Association. It is curious how men seem amiably separated according as their tastes and acquirements lead them to rapid operative or slow nonoperative methods. The operative method of treating lordosis or angular curvature was, however, not mentioned; were it still received with favor I think it would have been otherwise.

Inasmuch as the capacity of the auditorium is limited practically to the membership, admission to the surgical association was given only to members and invited guests; and then it was overcrowded, even at the opening session. The president, this year, was Prof. H. Braun. The first papers were by Körte, Franz, Riese, Lexer and Hoffmann, and concerned the surgery of the arteries and their surgical anatomy, especially in the osseous system. The most interesting portion of the morning was the demonstration by Hoffa, who is well known to us as an orthopedic surgeon, and by his book on fractures and dislocations, of some twenty cases, selected out of a large number, in which he had practised tendon plastic or transplantation methods. His demonstration was most interesting and most convincing as to the value of the procedure in many instances of paralytic deformity and loss of function.

The features of the first afternoon were papers on the method of preventing collapse of the lung during operations within the thorax. Sauerbruch, of Breslau, exhibited a pneumatic cabinet in which may be enclosed the head of a patient and the anaesthetiser, while the air pressure is raised a little; or within which conditions may be reversed, so that the head of the patient is outside, while the operator and his assistants operate on the thorax from within the cabinet under a slightly reduced barometric or manometric pressure. The former is a temporary matter and submits the anaesthetiser to a condition like that under which men work in caissons. The latter is quite new and experimental.

Mikulicz, in whose clinic this cabinet has been once tested, reported the loss of his patient. A much simpler method of establishing similar conditions was described by Petersen and Brauer, of Heidelberg, who also reported the loss of the only patient operated by their procedure. Both methods were demonstrated after the meeting, upon dogs, and both beautifully illustrated what was claimed for them,—*on animals*. Whether either of them is practical or practicable remains to be shown.

The balance of this afternoon session was devoted to the usefulness of the *x*-rays, in malignant disease, and to the nature of this disease. Petersen read a paper on the inoculation and implantation of cancer, but made it no clearer than before that the surgeons have been much more ready to accept the parasitic theory than the pathologists who work only in the dead-house and at the desk, i. e., that cancer is an infectious disease. Other opinions to the same effect were distinctly voiced by various speakers in public and private.

What can be done in the treatment of these cases by Röntgen rays and by radium was then illustrated by Lassar, the eminent dermatologist, who exhibited a remarkable collection of some forty or fifty patients thus treated. They all were cases of superficial lesions, some original, some recurrent. Of some of them he had microscopic sections, while of all he had beautifully colored wax models, showing the condition before commencing treatment. The results were beautifully demonstrative of the benefits obtainable in certain cases, especially the inoperable. And yet Lassar is himself unwilling to speak of them without great reserve—which was quite noteworthy. I do not think such a demonstration could be made anywhere else in the world; yet in spite of this and in the face of all these facts, there was a caution in his speech which should find many imitators. With us the temptation is too strong to regard two or three apparent successes as a final demonstration that *x*-rays will *cure* cancer. Nor was any attempt made to show that these lesions are not best treated by

a clean excision, especially when seen reasonably early. Lassar, moreover, took pains to set forth numerous instances in which little or no benefit accrued—for example, in epithelioma of the tongue, where the lingual lesion might perhaps improve, but the deep infiltration surely would progress. Nevertheless, he showed a number of cases of recurring cancer of the breast, especially the disseminated and ulcerating forms, which had been greatly improved. Of radium he had but little to say, though that little was rather favorable.

The first evening was devoted to demonstrations with the projecting lantern. Krause, Lexer, and Hoffa all showed lantern slides, those of Lexer on the distribution of the bloodvessels in the bones being especially beautiful and exciting the greatest admiration. He injects the arteries with a mercurial preparation and then subjects the specimens to the Röntgen rays.

The second morning was practically devoted to the surgery of the upper abdomen. Kehr, who boasts that he has built up his little town of Halberstadt, reported on five new operations which he had practised on the biliary passages; i. e., resection of both ducts and a hepatico-duodenostomy, hepato-cholangio-enterostomy, ligature of the hepatic artery for aneurism, gastroduodenostomy after closure of the upper part of the duodenum, and implantation of a pancreatic fistula in the gallbladder with a subsequent gastrocystotomy. I find that by some of the German surgeons Kehr is not taken very seriously, while by others, he is—very seriously. Körte, of Berlin, had a most interesting paper on the relations of biliary and pancreatic diseases; Ehrhardt talked entertainingly about the peritoneal infections, which arise from the biliary passages, and the venerable Bardenheuer, of Cologne, spoke on pancreatic hemorrhages. He, by the way, some years ago wrote a large book on the traction or extension treatment of fractures, which, as everyone at home knows, is absolutely of American origin.

The balance of the day was devoted to a miscellaneous program, which included many subjects, frequently illustrated with patients, and always with specimens or drawings.

The annual dinner was held at the Savoy at 5.30 p. m. In this respect our German friends set a good example. Only four speeches were made, and the company had separated by half-past eight. The advantages of such an arrangement are obvious.

The third day's session opened with a series of papers on bone surgery by a dozen different writers. This was followed by a sort of symposium on surgical diseases of the kidney, in which Kümmel and Krönlein dealt especially with tubercular lesions, and showed some remarkable specimens. Calculous disease re-

ceived considerable attention. Ahrens reported a nephrotomy of a solitary kidney, while Barth showed a patient with horseshoe kidney upon which he had done an exploratory incision. Several writers then dealt with decapsulation of the kidney for Bright's disease—a method evidently not popular over here, for, so far as I gathered, no one mentioned it save to condemn it.

The third afternoon session was devoted to the peritoneum, stomach and intestinal canal. Mikulicz discussed the possibility of increasing the resisting power of the peritoneum; Payr reported on mesenteric thrombosis following intraabdominal operations, and numerous papers were read on ulcer of the stomach, cancer of the pylorus and intestines, and the operative measures to be instituted for their relief. The writers were of one accord in at least this respect,—that all ulcerative lesions of the gastrointestinal tract were best treated by operation of some kind.

The fourth morning session began with the apparently inevitable subject of appendicitis, which was discussed especially by Lauenstein, Federman, Cordua, Karewski and Sonnenburg. These are the men in all Germany who are, perhaps, most competent in this direction. Sonnenburg told me that he had himself operated on nearly eighteen hundred cases, which puts him on a plane with our best American surgeons, and entitles him to respectful hearing. He certainly has had larger experience with this condition than that of scores of his colleagues combined. During the session Brentano showed the specimen of a remarkable case of Hirschsprung's disease; i. e., congenital reduction in length and enlargement of caliber of the intestinal canal. It came from a boy of 14, who suffered from coprostasis to such extent that at one single time twenty-seven pounds of fecal matter were taken away from him. During the final afternoon session a variety of papers were read, one of them on so-called chorion-epithelioma of the testicle, by Holländer, while specimens and drawings were as numerous as ever.

Prof. Krönlein, of Zürich, was elected president for the ensuing year. He will be a great improvement upon Dr. Braun, of Göttingen, the retiring officer, who is old, feeble, toothless and hard to hear or understand, and who seemed to have little power of preserving good order during the meetings.

Altogether the meeting has been to me one of great entertainment. There has been little new, and nothing of tremendous interest, but there has been evinced a notable degree of research work and those rare, germanic traits of industry and never-tiring zeal. I have been making comparisons with the similar meetings of our own American Surgical Association, and do not feel that we need consider ourselves one whit inferior in any respect. Our

meetings are more dignified, the papers are equally scientific, and our members much less prone to indulge in personalities or slighting and even insulting behavior. My regard for German surgery was comprehensive enough before I attended this meeting. I cannot say that it has been particularly enhanced thereby.

The American surgeons certainly lead the world today, and can teach their foreign colleagues many things. Some of the most progressive and least prejudiced of the continental surgeons are beginning to realise and acknowledge this, and a number of them are coming over to our World's Fair. Let us welcome them and impress them so far as we can, but let us not repeat the Lorenz fiasco. After all it repays our students to come to the continent, for they may learn what to avoid as well as what to do. It seems to me that the greatest advantage attendant upon studying surgery in the German clinics is the frequency with which one may follow cases from the operating table to the autopsy room, where their perplexities are so often cleared away.

The Anglo-American Medical Society meets every Saturday night in the Central Hotel, when I had the pleasure of addressing some fifty of my fellow countrymen. Every American coming here to study should ally himself at once with this excellent organization, which can be of the greatest service to him. It is the only labor union I know of which serves to bring out the best work of the men who belong to it as well as of the various teachers in Berlin, who are anxious to do all they can to win the commendation and patronage of its members.

ROSWELL PARK.

Berlin, April 10, 1904.

Medical Legislation at Albany.

THE OPTICIANS AND OSTEOPATHS DEFEATED.—LETTER FROM DR.
VAN FLEET.

Editor Buffalo Medical Journal:

SIR—The legislature has adjourned, and both the optometry bill and the osteopathy bill have failed to become laws. There never was an effort made to secure legal recognition by any of these peculiar practitioners which had in it anything like the force of the opticians' bill of this year. In the beginning of the session the reports which I received from various quarters, seemed to indicate that the measure would become a law. But thanks to the support given the committee on legislation by the medical

profession in all parts of the state, what seemed to be defeat for us has been turned into victory. I have no doubt that the medical profession can, through its representatives, control legislation affecting the medical laws, and the public health generally. In my experience I have found the various members of the legislature, not only willing, but anxious to learn the views of our profession, and the majority of them are willing to be guided by our advice.

I want to thank the medical profession, through your JOURNAL, for the very great aid given our committee, and to express the hope that sometime in the future when the necessity again arises, we may feel at liberty to call on you and the united profession for the same kind of aid.

FRANK VAN FLEET,

*Chairman of the Committee on Legislation
of the Medical Society of the State of New York,*
April 16, 1904. 60 East 77th St., New York.

TOPICS OF PUBLIC INTEREST.

THE passing of the coroner in Greater New York will soon be witnessed. Senator Elsberg introduced a bill early in the session of the last legislature to substitute medical examiners for coroners on the expiration of the terms of the latter officers and under the whip and spur of an emergency message from Governor Odell, which seemed to be necessary to arouse the members to the importance of the measure, the bill, having previously received the sanction of the senate, was passed in the assembly by a vote of 80 to 30.

The new system established is substantially that which has been in vogue in Buffalo and the county of Erie for some years, and we cannot doubt that New York will experience, in the substitution of qualified medical examiners for political place holders, similar benefits to those already realised here.

Dr. C. G. LEO WOLF, health officer of Niagara Falls, has submitted his report for 1903, from which some interesting figures are obtained. For example, we observe that the population of the city of the cataract has increased more than 10,000 in the last five years. The number of births decreased during 1903 by 29, whereas the number of marriages was 65 more than during the previous year, and the decrease in the number of deaths was 11. Typhoid fever is on the increase, 14 more deaths being recorded for 1903 than for 1902. The entire report is most creditable to the health officer, indicating efficiency in administration and economy of expenditures.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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Dentifrices and the Teeth—CALOX.

IF IGNORANCE relating to the care of the teeth, or indifference regarding its importance could be overcome, the human race would be healthier and longevity would be increased. The occupation of the dentist would then be limited to a somewhat narrower field than he occupies at present, but it would be none the less dignified. To overcome tooth decay, the dentist must be something more than a mere cleaner of teeth, though the importance of this latter function should not be decried. To clean the teeth properly is an art that is not acquired by every dentist.

Since the discovery of the real causes of tooth decay only ignorant or dishonest dentists impeach the integrity or skill of the medical profession by telling their patrons that strong and irritant medicines have caused the difficulty. Every educated dentist knows that tooth decay is due to the local action of lactic acid, produced through the agency of specific kinds of bacteria, which find a suitable field of growth in the human mouth. It is also generally conceded by authorities in dental pathology, that erosions of the teeth causing extensive loss of structure are due also to acid action, either by acid fermentation in the mouth or by acidity of the secretions of the mucous glands of the mouth.

When, therefore, a dentist is heard charging the administration of "strong medicines" with causing the early decay of teeth, he should be placed on the list of ignoramuses, or in the category of knaves. He betrays either ignorance or wilful depravity.

It was not our purpose, however, to discuss this phase of the subject when we began this writing, but we have been led into

it by mere correlation of thought. To return, then, to our original purpose, we invite attention to the fact that a new dentifrice has been presented to the public through both medical and dental professions, which promises to accomplish what others have failed to do—namely, sterilise the mouth, arrest decay, and at the same time prove both agreeable and harmless. The name of this new dentifrice is *calox*,—a calcium dioxide added in appropriate proportions to English precipitated chalk as a basis, and which is then rendered very slightly saponacious and delicately flavored. It is to calcium dioxide that this new dentifrice owes its cleansing and germicidal properties. Of the value of the latter chemists say that calcium dioxide, like hydrogen dioxide, has the property of giving up oxygen in the nascent state when brought into contact with water or dead organic matter, at the same time forming milk of lime; it is, therefore, a powerful oxidising agent, germicide and antacid. It is quickly and completely decomposed by all acids, thus forming a salt of calcium and setting free hydrogen dioxide.

Mr. E. H. Gane, a chemist of experience, read a paper recently before the New York Odontological Society, in which he discussed the dental applications of some of the new oxygen compounds. An abstract of this paper is presented elsewhere, and will prove of interest to every person who desires to preserve sound and wholesome teeth.

The sum of the whole matter would seem definitely to indicate that when this new dentifrice, *calox*, is brought into contact with the fluids of the mouth, oxygen is at once liberated, which, while without effect on the soft tissues of the mouth, is an effective destroyer of decomposing organic matter and bacterial life. In contact with the local acid areas found in decay of the teeth, erosion, or acid accumulations of fermenting food particles between or upon the teeth, these local acids decompose the calcium dioxide of the dentifrice, which neutralises their acidity by entering into combination with the calcium of the dioxide and setting free hydrogen dioxide to exercise its well-known germicidal and detergent effects upon the bacteria and dead organic matter present. Because of this chemical reaction of calcium dioxide with acids, *calox* possesses a selective property for those situations on and about the teeth where local acid areas exist, and its oxidising, neutralising and germicidal powers are therefore exerted to the greatest extent where there is most necessity for such action.

This interesting subject might be pursued to a greater length, but we have said enough to point out its importance and to indicate a remedy,—a joint product of chemical and dental science,—for one of the greatest evils of our modern civilisation.

The American Medical Association—Atlantic City— Lehigh Valley R. R.

THE fifty-fifth annual session of the American Medical Association will convene at Atlantic City on Tuesday, June 7, 1904, to continue during four days. There are several reasons why the place selected should prove advantageous and attract a large attendance. One of the important features to be considered in selecting the place of meeting of this association is that of hotel accommodations. At Atlantic City this subject need give no anxiety either in reference to quantity or quality. There are plenty of them and there is no place in the world where guests can be made more comfortable either as to quarters, or quality of table. Moreover, there are first class boarding houses in abundance with lower rates than hotels, for those who prefer them.

The next item of importance is accessibility and here, again, there is no room for doubt. The railways from all parts of the country converging at Philadelphia, supply the fastest and most luxurious trains, and the distance from the Quaker City to the city by the sea is compassed in an hour or two. These two material questions necessarily enter into the plans when a trip of this kind is in contemplation—namely, hotel accommodations and railway facilities and comforts. For the Atlantic City meeting in June, no better facilities or comforts are offered anywhere in this country.

It is more than probable that this meeting will be more largely attended than any other in the history of the association. Several conditions conspire to give this prognostication more than a semblance of truth. The season of the year is one, the location is another, its accessibility is a third; but quite the most important of all is the unification of the profession in the state of New York, which undoubtedly will be an accomplished fact before the date fixed upon for the meeting, in so far as all the legal and business requirements necessary to accomplish the result are concerned. This latter reason certainly ought to justify the expectation that a larger number of Buffalo physicians will be present than ever before.

This meeting offers many attractions to physicians in Western New York. The journey is short, the little interruption in professional work that it will afford and the delightful entertainment in prospect, together with the reasonable rates of fare, combine to invite a large body of medical men to avail themselves of this exceptional opportunity. The picturesque Lehigh Valley Railroad offers a splendid opportunity for a view of scenery that is nowhere excelled and it should be selected, by all means, as the

route of travel by those who go from this vicinity. Mr. W. B. Wheeler, Western Passenger Agent, whose address is 369 Main street, Buffalo, will gladly furnish all information necessary to the comfort and convenience of delegates, members and visitors. He can also be called up by telephone—Seneca, 2670. It is not too early for those who would secure desirable accommodations to consult Mr. Wheeler at once.

THE prevalence of pneumonia during the past winter has been a subject of remark throughout the Empire State. In New York City it has proved fatal in a remarkable degree especially among the aged. During the week ending March 5, the number of deaths reported to the health department from this disease was 460,—the highest recorded number of deaths from pneumonia in a single week in the history of the metropolis. The next week—namely, that ending March 12, the number of deaths had dropped to 358, a remarkable falling off, though still a high rate. The long and rigid winter has accentuated its severity with an unexampled austerity.

THE optometry bill was in evidence at Albany during the month of March. On the 9th, a public hearing was had before the senate committee on public health, the opposition to the bill being led by Dr. Frank Van Fleet, chairman of the legislative committee of the Medical Society of the State of New York. From Buffalo, in support of Dr. Van Fleet's contention, Dr. William C. Krauss, president of the Medical Society of the County of Erie, and Drs. Ernest Wende and Edward C. Clark, appeared before the committee. Dr. Wende is a colleague of Dr. Van Fleet on the legislative committee of the State Medical Society and is also a member of the legislative committee of the Medical Society of the County of Erie. Dr. Clark is a colleague of Dr. Wende on the latter committee. Dr. Krauss was designated to make the argument for the Buffalo delegation, which was substantially as follows:

I represent the Medical Society of the County of Erie, the third largest in the state. I am not connected with any optical house and do not fit glasses. I speak as a neurologist. The eye is intimately associated with the brain. Twelve pairs of nerves radiate from the base of the brain to the senses. Six pairs go to the eye. In the eye are motor nerves, sensory nerves, trophic nerves and nerves of special sense.

An early beginning of apoplexy is often determined by an examination of the eye. A slight headache and convergence of

the eyes often means disease. To go to the eye-glass man instead of to a physician may mean delay that puts off the necessary consultation and examination until it is too late. An early recognition of a diseased state, which is first felt in the eye, often saves a life. Correcting the nerves, treating them, treating the brain or the spinal cord is the only way to accomplish much for the eyes. Defects of vision are often easily traceable to some disease that no dealer in eye-glasses can cope with by merely fitting spectacles to the eyes.

We come here today to bolster up the State Medical Law, so that only the best educated men and women shall get into the profession. We want the standard of our doctors as high as that in Europe, where they begin to teach them when they are six years of age. We must not lose sight of the fact that we should look out for the poor. All advertisements of the "greatest specialists" are not to be believed. We laugh at them as trade devices, but the poor man goes to them and often receives lasting injuries. In general, I would say that we should not make it easier to get into the medical profession. This bill is to place persons without requisite qualifications in a position legally to treat defects of the eyes, the causes of which they cannot know.

Elsewhere we print a letter from Dr. Van Fleet, the indefatigable chairman of the legislative committee of the Medical Society of the State of New York, showing that the opticians and osteopaths both failed in their endeavors to discredit the medical laws, the people and the profession—for which thanks to Dr. Van Fleet and his colleagues of the committee.

THE memory of Dr. William E. B. Davis, late of Birmingham, Ala., will be appropriately perpetuated by the erection of a monument to cost \$2,000. The money will be furnished by the Southern Surgical and Gynecological Association of which Dr. Davis was the originator as well as founder. He not only conceived the idea, but organized the association in all its details and served as its secretary and executive officer for thirteen years. The association does well in thus testifying its appreciation of this distinguished physician, whose memory will live in spite of granite or bronze.

THE report of the commission to investigate the condition of the adult blind in the state of New York, of which Dr. F. Park Lewis, of Buffalo, was president, has been transmitted to the legislature and published in pamphlet form. The object in creating the commission, stated in brief, was to devise some means whereby blind persons, otherwise than those who follow professional pursuits,

could be provided with such industrial occupation as would make them self-supporting.

The work of the commission was exhaustive and the report is full of interesting material relating to state provisions for the adult blind, not only in this but in other countries, and it may well attract the attention of philanthropists as well as members of the legislature. Among the recommendations made is one to establish tentatively in Buffalo, one industrial training school for blind persons over 21 years of age. Another is, that a permanent commission be appointed to direct and control the educational and industrial interests of the adult blind. It would seem advisable for the state to see to it that both suggestions are carried out.

A LETTER from Professor Roswell Park, published elsewhere, giving his impressions of the recent congress of German surgeons at Berlin, will be read with interest by his many thousand friends in this country. Dr. Park tells the story in his usual attractive style, which is at once simple in its English and effective in its method. It is pleasant to learn, through such a reliable observer, that our own surgeons are in nowise inferior to the German leaders, who have been held up as models, and that the American Surgical Association is not a whit behind its great German prototype. Dr. Park is expected home early in May.

THE Medical Society of the County of Erie, as will be observed in the proceedings published elsewhere, has ratified the action of the parent body, the Medical Society of the State of New York, relating to unification. The Erie County Medical Association took similar action at a meeting held April 18, 1904. These are the last steps required by the local organisations, and consolidation will doubtless be completed within a few weeks.

PERSONAL.

Dr. GEORGE E. BREWER, formerly of Buffalo, and lately professor of clinical surgery at the College of Physicians and Surgeons, Columbia University, has been assigned a seat in the medical faculty of that university. Dr. Brewer is a graduate of the University of Buffalo, class of 1884.

Dr. WILLIAM A. EVANS, of Chicago, is among those considered for the presidency of the University of Illinois, vice Dr. A. S.

Draper, appointed commissioner of education of the state of New York. Dr. Evans is a well-known physician of Chicago, 45 years old, and has been practising his profession since he was graduated, in 1885, from Tulane University, Louisiana. He went to Chicago twelve years ago, and in a comparatively short time gained an international reputation through his original researches into many fields of scientific and economic effort. He is an ex-president of the Chicago Medical Society and a leading member of the principal medical bodies of the city. Dr. Evans will be remembered pleasantly by the members of the American Association of Obstetricians and Gynecologists who attended the meeting at Chicago, last September, both for the spirited address of welcome which he delivered upon the opening of the meeting and also for the charming speech made at the banquet.

Dr. ROSWELL PARK, of Buffalo, who has been spending a few weeks in Europe, will return and resume his surgical practice about May 10, 1904.

Dr. H. B. BROWNELL, of Buffalo, was one of a group of physicians who sailed for Europe in the latter days of April.

Dr. CHARLES W. BANTA, of Buffalo, sailed for Europe in company with Dr. Buswell and others April 23, 1904, to remain abroad several months.

Dr. F. WHITEHILL HINKEL, of Buffalo, will remove his office about June 1, 1904, from 412 Franklin street to 581 Delaware avenue. Hours: 9 to 1.

Dr. HENRY C. BUSWELL, of Buffalo, sailed for Europe on the Pretoria, April 23, 1904, for an extended tour in Great Britain and on the continent. He will be absent several months.

Dr. HENRY Y. GRANT, of Buffalo, who with Mrs. Grant has been spending the winter in Europe, returned about April 22, and has resumed his ophthalmological practice at 401 Delaware avenue.

Dr. GUSTAV A. POHL, of Buffalo, removed his office and residence, May 1, 1904, to 621 Oak street near Carlton. Hours: 8.30 to 9.30 a. m., 9 to 2 and 7 to 8 p. m. No Sunday hours. Bell telephone.

Dr. EDWARD J. MEYER, of Buffalo, has gone to Europe to spend a number of months.

Dr. C. H. W. AUER, of Buffalo, has been reelected president of the medical staff of the German Hospital to serve for the current year.

Dr. JOHN O. ROE, of Rochester, has removed his office from 28 Clinton avenue, north, to 44 Clinton avenue, south.

Dr. and Mrs. LAWRENCE G. HANLEY, of Buffalo, entertained at dinner at their home on Porter avenue, Saturday evening, April 16, a number of physicians who were on the eve of departure for Europe. The company consisted of Drs. H. C. Buswell, Edward J. Meyer and Charles W. Banta, voyageurs. Other guests were Drs. Rollin L. Banta, Edward T. Smith and John M. Mesmer, Buffalo, and B. E. Smith, Angola. Dr. and Mrs. Hanley expect to join the European party at Berlin in August.

Dr. WILLIAM T. BULL, of New York, has resigned the professorial chair of surgery at the College of Physicians and Surgeons, Columbia University, to take effect June 30, 1904. Dr. Bull's action is greatly regretted by his colleagues and others. This step has become necessary on account of the increasing demands of his private practice.

Dr. L. S. McMURTRY, of Louisville, read a paper before the Saint Louis Medical Society by invitation, April 16, 1904.

Dr. P. MAXWELL FOSHAY, of Cleveland, has removed to Chicago to take the medical directorship of the western branch of the New York Mutual Life Insurance Company. Dr. Foshay was editor of the *Cleveland Medical Journal*, which he conducted with signal ability. He was one of the committee on reorganization of the American Medical Association, and achieved distinction in that service. He is one of the earlier licentiates of the New York State Medical Examining and Licensing Board, his license being No. 9. While Dr. Foshay will be missed in Cleveland, where he has been distinguished for activity in all that goes for medical progress, he will receive a cordial welcome in Chicago, where a larger field awaits his energetic labors.

OBITUARY NOTES.

Dr. GUILFORD W. McCRAY, of Buffalo, died of apoplexy, at his residence, April 18, 1904, aged 73 years. He took his medical degree at Castleton, Vt., in 1857. He practised first at Varysburg and afterward at Cowlesville, N. Y. He came to Buffalo in 1858, and associated himself with the late Dr. S. L. Grosvenor in the drug business for many years. After the latter's death, Dr. McCray continued the business independently for a number of years in the retail line, but for the past twenty years he conducted a wholesale drug establishment.

Dr. AUSTIN D. SMITH, of East Pembroke, N. Y., died of apoplexy at his home, March 25, 1904, aged 74 years. He graduated at Geneva Medical College in 1869, practised first at Alexander, then at Aurora, Akron, and Oakfield, finally locating at East Pembroke in 1875. He is survived by his wife, one son, Dr. Elliott C. Smith, of Corfu, and a daughter.

Dr. WILBUR S. NUTTEN, of Newark, N. Y., died at his home April 18, 1904, aged 64 years. He graduated from the College of Physicians and Surgeons, New York, in 1863, and was a member of the various local and state medical societies.

Dr. ALFRED B. KIBBE, a graduate of the University of Buffalo, in 1880, died at his home in Seattle, Wash., March 27, 1904.

Dr. J. METCALF POLK, of New York, son of Dr. W. M. Polk, dean of the Cornell University Medical College, died March 29, 1904, at the home of his father. He was taken ill with a cold about ten days previously, and pneumonia developed, after which he was attacked with edema of the lungs, which caused his death. Dr. Polk had been practising only a short time, and was a member of the visiting staff of Bellevue Hospital.

Dr. SYLVANUS E. PARKER, of Naples, N. Y., died at his home, April 4, 1904, aged 53 years. He graduated at the University of Buffalo in 1877.

SIR HENRY THOMPSON, Bart., the distinguished English surgeon, died in London, April 18, 1904. He was born August 6, 1820, and was created baronet in 1899. He was the author of many scientific surgical papers, wrote two novels,—“Charley Kingston’s

Aunt" and "All But,"—was a painter of no mean ability and, besides, was a student of astronomy.

Dr. WASHINGTON H. BAKER, of Philadelphia, died at his home in that city, April 1, 1904, aged 52 years. He graduated at the University of Pennsylvania in 1875. He was a fellow of the American Association of Obstetricians and Gynecologists.

Dr. DENNIS D. LOOP, of North East, Pa., died at his home, April 2, 1904, of apoplexy, aged 76 years. He graduated at the University of Buffalo in 1864, and served for many years as a curator of that institution.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the months of March and April as follows:

Section on Surgery.—Tuesday evening, March 1.—Program: A consideration of the question of drainage in cases of acute appendicitis with spreading peritonitis, Lucius W. Hotchkiss, New York, president of the New York Surgical Society.

Section on Medicine.—Tuesday evening, March 8.—Program: Malignant endocarditis, Henry R. Hopkins; discussion by Chas. G. Stockton and Geo. W. York.

Section on Pathology.—Tuesday evening, March 15. Program: The serum test for human blood in medico-legal cases, with demonstration, Herbert U. Williams. Specimens and cases will be exhibited by DeLancey Rochester, A. L. Woehnert, C. A. Bentz, W. H. Mosher and Carroll Roberts.

Section on Obstetrics and Gynecology.—Tuesday evening, March 22. Program. Sterility and its treatment, Herman E. Hayd; discussion by S. Y. Howell, L. G. Hanley, L. Schroeter, and P. W. Van Peyma.

Section on Ophthalmology, Otology, Laryngology and Rhinology.—Tuesday evening, March 29. Program: Diseases of the accessory sinuses of the nose, especially of the maxillary antrum, George L. Richards; discussion will be lead by Frank W. Hinkel and W. Scott Renner.

Section on Surgery.—Tuesday evening, April 5. Program: Syphilitic gummata of skin and subcutaneous tissues, illustrated by stereopticon, Grover W. Wende.

Section on Medicine.—Tuesday evening, April 12. Program: Enuresis nocturna, Julius Ullman; discussion by Irving M. Snow; Mental changes of old age, Herman G. Matzinger; discussion by Floyd S. Crego.

Section on Pathology.—Tuesday evening, April 19. Program: Analysis of stomach contents and other physiological fluids, with theoretical deductions regarding the roll played by chlorides and other salts in human metabolism, G. H. A. Clowes; discussion by Allen A. Jones; Demonstration of transplantation carcinomata in mice, H. R. Gaylord.

THE sixty-eighth annual meeting of the Medical Society of the County of Chemung will be held at Elmira, on Tuesday, May 17, 1904, beginning at 2.30 o'clock p. m., under the presidency of Dr. Hamilton D. Wey, Elmira. Among the papers to be read are the following: (1) Annual address of the president, The present status of vaccination; (2) urinalysis in pregnancy, Dr. Anna M. Stewart; (3) deferred operation in the repair of lacerated perineum, Dr. A. H. Baker; (4) asepsis in the obstetric chamber, Dr. William Warren Potter, Buffalo; (5) accurate determination of blood pressure as an aid to diagnosis, by Dr. W. Harry Glenny, Buffalo.

THE American Academy of Medicine will hold its twenty-ninth annual meeting at the Shelburne, Atlantic City, beginning on Saturday, June 4, at 11 a. m., and continuing through Monday, June 6, 1904, under the presidency of Dr. John B. Roberts, of Philadelphia. Dr. Charles McIntire, of Easton, Pa., is the secretary.

THE Western New York Homeopathic Medical Society held its twentieth annual meeting at the Hotel Iroquois, Buffalo, April 8, 1904, under the presidency of Dr. D. H. Arthur, Gowanda.

THE Lake Erie Medical Society held its regular quarterly meeting at Dayton, April 8, 1904. Dr. S. S. Bedient is the president, and Dr. B. E. Smith, Angola, is the secretary. The following program was observed: Treatment of gonorrhea, Joseph Rieger, Dunkirk; Some inflammations of pelvis and abdomen, McDonald Moore, Fredonia; Hematmisis, due to back pressure from contracted liver, A. L. Benedict, Buffalo; Pyemia, Walter H. Vcsbury, Dunkirk.

BOOK REVIEWS.

DISEASES OF THE EYE. By L. WEBSTER FOX, A. M., M. D., Professor of Ophthalmology in the Medico-Chirurgical College of Philadelphia; Ophthalmic Surgeon in the Medico-Chirurgical Hospital. Octavo, pp. 603, with five colored plates and 296 illustrations in the text. New York and London: D. Appleton & Company. 1904. (Sold by subscription only, price \$4.00.)

Works on diseases of the eye have been appearing, of late, with unusual frequency. The list is already long, and it scarcely seems necessary to extend it. Too often these works have been compilations only, and although good as such, they lack that discrimination which experience alone can give. Dr. Fox, however, has offered a work to the profession which is the result of a long and varied experience, both as a teacher and practitioner, and from this point of view his treatise is welcome, and deserves more than a passing notice. It is concisely written, and briefly considers not only the diseases of the eye and their medical and surgical therapeutics, but also the development of this organ and its anatomy and physiology.

Pathology is very sparingly dealt with, and extended details are, for the most part, omitted. The author is thus enabled to give more space to symptomatology, diagnosis and treatment, and these subjects are presented in a careful and thorough manner. The work is amply illustrated, both in black and colors, and many of the illustrations are drawn from the author's own cases and reproduced by means of photo-engraving.

In diagnosis and treatment he avails himself of the latest electrical and x-ray appliances, and fully describes them. The newer remedies are also referred to, and their use is appropriately advised. Among these may be mentioned argyrol, dionin, adrenalin, itrol, cuprol, scopalamin and holocain. One of the most admirable features of the work is the prominence the author has given to the various operations on the eye and its appendages. He reviews, quite fully, those which have been proposed by others, and adds those which are original with himself, as well as original modifications of those of others. It is in these sections of the work that the author has made the most substantial contribution to the progress of ophthalmology. Being himself an expert operator, and evidently having quite a genius for devising new methods and improvements, his suggestions and recommendations undoubtedly have much merit, and are worthy of serious consideration by all ophthalmic surgeons. Although much attention has thus been given to operative procedures, yet such important subjects as refraction, accommodation and ocular motility, and those diseases which require medication, alone, have by no means been slighted.

• • The style of the author is clear, and in drawing from his own experience, his personality becomes apparent throughout the work.

To those who desire the judgment and suggestions of an experienced man in the diagnosis and treatment of diseases of the eye, this work is to be commended. It is not too large and diffuse for the student, it is not too small and abbreviated for the practitioner, and it contains much that will enlighten and stimulate the specialist.

A. A. H.

SOCIAL DISEASES AND MARRIAGE. Social Prophylaxis. By PRINCE A. MORROW, M. D., Emeritus Professor of Genitourinary Diseases in the University and Bellevue Hospital Medical College, New York; Surgeon to the City Hospital. Octavo, pp. 390. Lea Brothers & Co., New York and Philadelphia. 1904.

The subject dealt with by Morrow in this book has been attempted often before, sometimes extensively and again scantily, but never more delicately, scientifically, or thoroughly; moreover, it is presented in a way that makes it intelligent reading for educated men and women outside of the medical profession. This latter point is important, because any reform of statute or opinion regarding the propagation of social diseases must have the support of public opinion formed upon an intelligent understanding of the question in all its bearings in relation to community.

The dangers that venereal diseases introduce into the marriage state have received considerable attention of late, and they are becoming better and better understood by physicians; but, alas! for the laity, how little they appreciate the risks such diseases entail. Few young men are aware that gonorrhea is one of the most dangerous infections of its class, and that its results if neglected, or uncured, if it becomes chronic, are more lasting than any other venereal disease. If the young wife becomes infected by a gleety husband and her tubes take on suppurative disease, nothing short of excision, in many instances, will effect a cure. Sterility and woe are penalties often inflicted on an innocent woman for the sins of her lecherous husband. Who shall say the state has not some duty to perform looking toward the prevention of this direful state of affairs?

The dangers, however, are not alone to the wife, but the offspring suffer as well, if the infection be syphilitic; hence, if the sins of the father are to be prevented from being visited upon his children, some safeguard must be thrown around the marriage contract. It is a most difficult problem to deal with and possibly it never will be fully solved. The JOURNAL is inclined to agree with Simeon Ford, who asserts that, "the puritanical spirit is as yet too strong within us to permit vice to be legalised and regulated and kept within bounds. We'd rather go on being hypocrites and let blackmailers flourish and dishonest folk fatten."

In spite of all, however, the medical profession has a duty to perform which is well stated by Morrow to have for its object the protection of the innocent and helpless from venereal disease, and to safeguard marriage from its dangers, affirming that in

the fulfilment of this duty the highest ideals of preventive medicine are realised. The presentation of the subject scarcely could have been more fortunate in form or material, for it is a book full of interest: it instils into the mind of the people ideas of right and stimulates the best efforts toward the accomplishment of good.

A MANUAL OF HYGIENE AND SANITATION. By SENECA EGBERT, M. D., Professor of Hygiene in the Medico-Chirurgical College of Philadelphia. Third edition, enlarged and thoroughly revised. Duodecimo, 467 pages, with 86 illustrations. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$2.25 net.)

The interest in the subjects discussed in this modest volume is ever increasing among the laity as well as among physicians. As each class becomes better versed in hygiene and sanitation, there is more rapid progress toward the prevention of preventable diseases. It is impossible for municipalities to enforce proper sanitary regulations without the intelligent coöperation of citizens who know the importance of such measures as are enacted at the instance of the health department. For example, the ordinances relating to spitting on the streets or in the street cars are in operation in every city in which there is not a prevailing public sentiment in favor of their enforcement.

The book we are using as a text for these remarks has done much already, and will continue to do more, toward creating a wholesome public opinion on sanitary and hygienic questions. Egbert is a teacher of experience and an expert on these topics. What he writes, therefore, should carry the weight of authority. He has carefully revised this edition, adding much useful material and eliminating some that has become less so, until it now is in the forefront of books of its class. We regard it as one of the best manuals on sanitary and hygienic science in English print.

THE TREATMENT OF CERTAIN MALIGNANT GROWTHS BY EXCISION OF THE EXTERNAL CAROTIDS. By ROBERT H. M. DAWBARN, M. D., Professor of Surgery and Surgical Anatomy in the New York Polyclinic Medical School and Hospital; Visiting Surgeon to the City Hospital, New York. (The Samuel D. Gross Prize Essay). Octavo, pages 105. Philadelphia: F. A. Davis Co. 1903. (Price, \$2.00 net.)

A monograph of such exceptional quality as this one seldom falls into the reviewer's hands. It gives, in considerable detail, the labors of seven years in testing the value of excision of the external carotids, in arresting certain growths, malignant in character, and generally regarded as inoperable. Thus, the face, mouth, tongue, pharynx, and sometimes the cranial cavity, become the seat of neoplasms belonging to the class called inoperable malignant, and form appropriate fields for the operation proposed and put to practical test by the author of this monograph.

The first case in which Dawbarn put to test his operation is reported in full. It was done to arrest the growth of a round-

celled sarcoma of the nasopharynx, and consisted in reality of several operations. First, on June 1, 1895, Dawbarn tied the right external carotid at its origin. This did not have the effect of arresting nutrition, and June 10, ten days after the first, a second operation was made, which consisted of complete excision of the left external carotid artery,—the first time this operation was ever performed, as far as can be ascertained. The third operation was made January 14, 1896, which was a removal of the growth, and consisted in the entire excision of the right superior maxilla. Eight years afterward the man continued well, without evidence of return of the growth. This is a surgical achievement that should stimulate further attempts in this direction.

The author was awarded the Gross prize of the Philadelphia Academy of Surgery, of one thousand dollars, for this monograph, though when he began his investigations he had no thought of offering whatever report thereof he might subsequently make in competition for any prizes. The monograph should be in the hands of every surgeon.

LEA'S MEDICAL EPITOME SERIES. Organic and Physiologic Chemistry. A Manual for Students and Practitioners. By A. McGLANNAN, M. D., Associate Professor of Physiologic Chemistry. Instructor in Clinical Laboratory, College of Physicians and Surgeons, Baltimore, Md. Duodecimo, pp. 246. Illustrated with 9 engravings. Series edited by V. C. Pedersen, A. M., M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. (Price, \$1.00.)

There two important divisions of chemistry are presented in this book in skeleton form in a most admirable manner for memorising by students who are preparing for examination. Its general plan is quite like that of similar works in the epitome series that have preceded it. It is prepared by an instructor of experience, and contains the essentials of organic and physiologic chemistry, gleaned from the best sources. For the purposes it is intended it is as complete as need be, and is unexcelled by any similar compend that we have seen.

LEA'S SERIES OF MEDICAL EPITOMES. Anatomy. A Manual for Students and Physicians. By HENRY E. HALE, A. M., M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons (Columbia University), New York. Duodecimo, 384 pages, with 71 illustrations. Series edited by V. C. Pedersen, M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Lea Brothers & Co., Philadelphia and New York. 1903. (Cloth, \$1.00 net.)

Anatomy, the foundation of medical knowledge, must be memorised by the pupil in his earliest period of study. The tutor must instil its details by continued hammering. Every known expedient must be resorted to in order that the plastic mind may receive lasting impressions concerning even the smallest struc-

tural formation of the human body. In this book will be found a condensation of the essentials of anatomy, which will prove a great aid in acquiring the knowledge of the subject. It is one of the cleverest books of its kind with which we are familiar; its arrangement is of the best form, and every detail pertaining to perfection in bookmaking has been carried out to the letter. It is a book to be carried in the pocket and to be studied at intervals of travel between home and school, or upon journeys by rail or water. Indeed, the student should never omit the companionship of his "anatomy," whithersoever he goeth, or wheresoever he sojourneth.

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY. For Practitioners and Students. A Complete Dictionary of the Terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, and the kindred branches, including tables of Arteries, Muscles, Nerves, Veins, Bacilli, Bacteria, Micrococci, Streptococci; Eponymic Tables of Diseases, Operations, Signs and Symptoms, Stains, Tests, Methods of Treatment, etc., etc. By W. A. NEWMAN DORLAND, A. M., M. D. Octavo, 800 pages Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Price, \$4.50 net; with thumb index, \$5.00 net.)

It is surprising how much valuable information is compressed between the covers of this dictionary. The vocabulary alone is worth more than the price of the book, while the other material enhances its value very much. As a mere word book, it is not excelled by any dictionary of its size, and the heavy-faced type in which the words to be defined are printed makes it easy for the eye to reach the word desired with despatch. Many additions of words and tables have been made in this edition, and it is made to represent the immediate present as far as can be done by such a book. Its workmanship, too, is of the very best, its flexible cover making it pleasant to handle. It is the dictionary, *par excellence*, for the physician's library table.

ATLAS AND EPITOME OF OPERATIVE GYNECOLOGY. By DR. O. SCHAEFFER, of Heidelberg. Edited, with additions, by J. Clarence Webster, M. D. (Edin.), Professor of Obstetrics and Gynecology in Rush Medical College, University of Chicago. With 42 lithographic plates in colors, many text cuts, a number in colors, and 138 pages of text. Philadelphia, New York and London: W. B. Saunders & Company. 1904. (Cloth, \$3.00 net.)

The editor very appropriately says in his preface that students who graduate each year, know less about gynecologic operations than about almost any other department of operative surgery. This is because these clinics are practically valueless to the great majority of students. There is only one branch of operative surgery about which the average student knows less than he does of gynecology, and that is genitourinary work. And yet, they go forth to practise and take charge of gynecologic and genitourinary cases, which sometimes turn out well, not because the practitioner is adept or even superficially versed in either specialty, but because nature is long suffering and is kind.

It is to teach the student something of gynecology that this work is written, and it assuredly fills its mission admirably. The work is not a collection of rewritten articles; it is original, and is based on Dr. Schaeffer's abundant experience, and while it may not be regarded as a comprehensive textbook, it is much more valuable to the student than many works on the subject which are more pretentious in character. The illustrations are of the same excellent general style which marks all these atlases, and no practitioner would be excusable if he seriously blundered after a careful study of the descriptive text and very understandable illustrations. The book is a gem in the chain of volumes which make up the series.

N. W. W.

ATLAS OF THE EXTERNAL DISEASES OF THE EYE. By PROF. DR. O. HAAB, of Zurich. Second edition, thoroughly revised. Edited, with additions, by G. E. de Schweinitz, A. M., M. D., Professor of Ophthalmology in the University of Pennsylvania. With 98 colored lithographic illustrations on 48 plates, and 232 pages of text. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Price, \$3.00 net.)

A second edition of this admirable work proves most acceptable to every ophthalmologist, and indeed to others; for, with such graphic illustrations, the general physician is enabled to diagnose many diseases of the eye in their earlier stages, and so to call a specialist when he does not feel competent to conduct a given case. The descriptive text and fine chromo-lithographic plates taken together carry the student of external diseases of the eye along the pathway of the most intimate knowledge to be obtained outside the clinic itself, where all this material was collected. The second edition has been revised and a few pictures have been added, making the book as complete an atlas as can be made.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A practical Exposition of the Methods, other than Drug-giving, useful for the Prevention of Disease and in the Treatment of the Sick. Edited by SOLOMON SOLIS COHEN, A. M., M. D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Philadelphia. Volume VII. Mechanotherapy and Physical Education including Massage and Exercise by John K. Mitchell, M. D., Physician to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases. And Physical Education by Muscular Exercise, by Luther Halsey Gulick, M. D., Director of Physical Training in the Public Schools of Greater New York. Octavo, pp. 420. With 229 illustrations. Philadelphia: P. Blakiston's Son & Co. 1904. (Price for the set, \$27.50 net.)

In this admirable series many excellent volumes have appeared, but the one before us is not second in importance to any of its predecessors. It deals with methods that may be adopted for the preservation of health; or, in many conditions of invalidism, they may be invoked to cure. Exercise is too often neglected by physicians in the budget of advice given their patients; if, perchance, it is introduced, the directions are general instead of being specific, hence often the good expected is not obtained. In this

book minute details are given for exercise in sickness and in health, and all the conditions are carefully set forth in a scientific fashion.

Massage is recognised as a valuable aid to the physician in many ways and under a variety of circumstances, but it often does harm when misused. It is of doubtful value, and still more questionable propriety, when applied to the female pelvic organs. Erotic women who would scorn to masturbate themselves find in osteopathy a cover for their real desires, and an ally to appease their sexual hunger. This author finds pelvic massage of little or no value, but does not condemn it on the ground above referred to.

Orthopedics are dealt with quite extensively as well as scientifically, and the illustrations are also excellent. The entire volume, indeed, abounds in good material and in fine pictures, making it not only instructive, but attractive.

LEA'S SERIES OF MEDICAL EPITOMES. Normal Histology. A Manual for Students and Practitioners. By JOHN R. WATHEN, M. D., Professor of Surgery and Gynecology in the Kentucky School of Medicine, Louisville. Series edited by V. C. Pedersen, M. D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. Duodecimo, pp. 229. Illustrated. New York, Philadelphia: Lea Brothers & Co. 1903. (Price, \$1.00.)

This book is one that may well be found in the hands of physicians who have been some years in practice, as well as in those of the undergraduate student. Histology has not heretofore been made the subject of a compend or epitome in the manner set forth by this author. Many of the illustrations are microphotographs of actual histologic conditions, some of which are meritorious in a high degree. As an aid to the study and understanding of a complex subject it contains all that need be published in a compend. It embraces the essentials of the subject as taught at the present day, in acceptable form for those who desire an epitome for ready reference.

THE INTERNATIONAL MEDICAL ANNUAL. A Yearbook of Treatment and Practitioner's Index. Thirty-two contributors, American and Foreign. Twenty-second year. Octavo, pp. 750. New York and Chicago: E. B. Treat & Co. 1903. (Price, \$3.00.)

After a practical test we are convinced that this reference book compares favorably with any work of its class. It needs expert knowledge to prepare such a book, because of the immensity of the material at hand each year, and without great care the size of the volume would easily pass the proper limit. For twenty-two years this volume has presented itself and each edition has been better than the previous one, though it appears each time as if further improvement would be next to impossible. It would be well if the Annual revised its compounding of such words as *smallpox*, and omitted diphthongs in such words as *anemia*; how-

ever, these are questions that time will determine. The plates and other illustrations are useful in elaborating the text of a very excellent book.

LECTURES ON NEUROLOGY AND NEURIATRY, PSYCHOLOGY AND PSYCHIATRY.

After the Methods of the class-room, to the Author's Students, and Designed also for General Practitioners of Medicine and Surgery. By C. H. HUGHES, M. D., President of Faculty and Professor of Neurology, Psychiatry and Electrotherapy, Barnes Medical College, Saint Louis. Edited by Prof. Marc Ray Hughes, M. D. Octavo, pages 417 Illustrated. Saint Louis: Hughes & Co. 1903. (Price, \$3.00.)

The author has not aimed to present the various diseases of the nervous system, hence we do not find here a description of the well recognised types of cerebral, spinal, peripheral and functional diseases. He has chosen rather to present the method of examination of neurological cases. The principles which govern electro-diagnosis and therapeutics are given careful attention. The use of lumbar puncture in diagnosis is also accorded adequate consideration.

The book can hardly be called a guide for the practitioner, for the treatment of diseases forms but a small part of the author's plan. It is rather as a representation of the individual views of the author on many of the problems of neurology that this book is to be commended.

J. W. P.

BLAKISTON'S QUIZ COMPENDS. Compend of Gynecology. By WILLIAM H. WELLS, M. D., Chief of the Gynecological Staff of the Mount Sinai Hospital, Philadelphia. Third edition, revised and enlarged. With 145 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

Compendes appear to have become a necessity during these days of work and worry, in preparation for the various examinations that cheer the pathway of the undergraduate, not to mention the post-graduate examinations for license and for commissions in the public service. If, therefore, we must have compends let us have good ones such as this. In the edition under consideration some errors have been corrected and much new material has been added, so that it may be said to represent in condensed form the best gynecological teaching of the day. The illustrations, too, are many and well chosen. It contains all that is desirable in a compend.

MT. SINAI HOSPITAL REPORTS. Volume III. For 1901 and 1902. Edited for the Medical Board by N. E. BRILL, M. D. New York: Stettiner Bros. 1903.

The value of hospital reports is greatly enhanced by accurate editing. This octavo volume of 522 pages is filled with interesting clinical material carefully reported and properly edited. Here and there, too, is found an illustration, but more might have been inserted without doing violence to the scientific character of the

work. It would be a good plan for authors of hospital papers to give as much attention to their accurate illustration as would be given to a treatise or magazine article.

A memorial of Dr. Paul F. Mundé, who was associated with the Mount Sinai Hospital for twenty-four years, is published herein, accompanied by an excellent portrait of this distinguished physician. The book lacks a good index to make it what it should be.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA. Annual meeting held at Talladega, Ala., April 21-24, 1903. G. P. Waller, M. D., Secretary.

The state of Alabama has long been distinguished by an admirable medical association, perhaps the best organised state medical society in the union. The record before us would seem to justify this reputation. It begins with the usual secretary's minutes and other preliminary material, which take up 130 pages. In the second part, the scientific work is recorded, beginning with the annual oration by Lewis Coleman Morris, of Birmingham, the subject being, Medical and sanitary dissertations and reports. The monitor's address follows, and then the Jerome Cochran lecture, which latter was delivered by G. H. Price, of Nashville, Tenn. The first strictly medical paper, speaking clinically, is entitled, The care and management of women during pregnancy, by Edward Burton Ward, of Salem. An exhaustive essay on the American hookworm disease, by Ch. Wardell Stiles, of the United States Public Health and Marine Hospital Service, is printed in this section of the book. Neglected prophylactic and therapeutic measures forms the subject of an interesting paper by William H. Saunders, of Mobile. In the third and final part of the volume is printed the annual register of the association, which is a roll of the county societies. This splendid volume is a potent argument against state medical journals.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1902. Volumes I. and II. Washington: Government Printing Office. 1903.

The first volume of this report contains, in its preliminary material, statistics of the state school systems, together with a condensation of the legal provisions governing the practice of medicine and dentistry in the several political divisions. An interesting essay in the second chapter by Francis Newton Thorpe, on Franklin's influence in American education, should be read by every educator. The college-bred negro forms the subject of the third chapter, and will be read by many interested in the race problem. Chapter eleven is a translation from the German, relating to the medical inspections of schools abroad. It is an excellent essay on an important subject.

The second volume begins with a chapter on education in Porto Rico, followed by one on the same subject in Alaska. The

thirty-sixth chapter deals with professional schools. Some interesting statistics appear, among which we note that the number of medical schools in 1902 was 154, with 26,821 students, a gain of 64 over 1901. The number of homeopathic students was decreased by 261, while the number in non-sectarian schools increased by 248, and in eclectic and physiomedical, 77. Although there was an increase of medical students, there was a decrease of 407 in the number of graduates, due probably to the lengthened course of study, the full effect of which has not yet been felt.

Schools for nurses form the subject-matter of chapter forty-two. The number of these schools in 1902 was 545, number of nurses receiving instruction, 13,252 and the number completing the course was 4,015. This shows an increase in schools of 100, and in pupils of 1,653.

The various subjects of interest dealt with in these volumes serve to make them unusually important, and they will be examined by all persons having relations with public and professional instruction. It is to be regretted that they must wait so long for a report of such value. The time between the period covered by the report and its printing should be shortened.

BOVININE. A Compend of the Practice of Hematherapy as applied to General Medicine and Surgery. Octavo, pages 574. Illustrated. New York: The Bovinine Co. 1902.

We have not observed, heretofore, on the part of the manufacturers of a proprietary preparation such a complete and detailed account of experiments, or so wide a range of application, as has been presented in this volume. It is prepared under the direction of Dr. T. J. Biggs, of Sound View Hospital, Stamford, Conn., and consists chiefly of clinical reports of cases treated by himself and others with bovine. Dr. Biggs is employed by the company to conduct clinical and scientific work, experimental and otherwise, and will supplement this published account of his findings, by further editions of this handbook from time to time, whenever it may seem expedient or necessary.

TRANSACTIONS OF THE AMERICAN OTOLOGICAL SOCIETY. Thirty-sixth annual meeting held at Washington, D. C., May 12 and 13, 1903. Volume VIII., Part II. F. L. Jack, M. D., Secretary.

The work of this society is always interesting embracing, as it does, the latest and best thought on the important diseases of the ear. In the present volume, the great interest now attracting to mastoid diseases is indicated by the fact that of sixteen contributed articles six relate to diseases of the mastoid, early or late, simple or complicated, most of which required operative intervention.

The society is the oldest of the special organisations, and maintains an excellent *esprit de corps*, fifty-five members having at-

tended this meeting,—nearly fifty per cent. of the membership. Dr. Oren D. Pomeroy, of New York, one of the charter members of the society, died during the previous year and an appropriate memorial of him prefaces the contents of the volume. An alphabetical index of otological bibliography from June 1, 1902, to June 1, 1903, compiled by B. Alexander Randall and Barton H. Potts, of Philadelphia, brings to a close this interesting record of the year's work of this splendid body of scientific workers.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume XXI. Edited by RICHARD H. HARTE, M. D., Recorder of the Association. Philadelphia: Wm. J. Dornan, Printer. 1903.

The annual volume of this famous association, always replete in scientific interest, this year seems overflowing with good material. In addition to the contributions of the regular members, of which there are many of exceptional quality, there are papers by foreign visitors that add much in value to the book. The first of these is "Small contributions to the surgery of the intestinal tract," by J. von Mikulicz, Breslau, in which he details methods of dealing with four conditions: (1) cardiospasm and its treatment; (2) peptic ulcer of the jejunum; (3) operative treatment of severe forms of invagination of the intestine; (4) operation on malignant growths of the large intestine.

The second foreign paper consists of an elaborate presentation, comprising more than sixty pages, of the "Surgery of the simple diseases of the stomach," by B. G. A. Moynihan, Leeds. These two celebrated surgeons, as might be anticipated, received the distinguished attention of a large audience during the presentation of their communications. In examining this highly instructive and splendid volume, we are impressed with the scantiness of the discussions,—a remarkable fact when the gifted membership is considered.

BOOKS RECEIVED.

Manual of Clinical Microscopy and Chemistry for Students and Practitioners of Medicine. By Dr. Hermann Lenhartz, Professor of Medicine and Director of Hospital at Hamburg, etc. Authorised Translation from the Fourth and Last German Edition, with Notes and Additions, by Henry T. Brooks, M. D., Professor of Histology and Pathology at the New York Post-Graduate Medical School and Hospital. With 148 illustrations and 9 colored plates. Pages xxxii-412. Octavo. F. A. Davis Company, Philadelphia, Pa. 1904. (Price, \$3.00 net.)

A Textbook of Physiology. By Isaac Ott, A. M., M. D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia. With 137 illustrations. Octavo, 563 pages. F. A. Davis Company, Philadelphia, Pa. 1904. (Price, \$3.00 net.)

Transactions of the College of Physicians of Philadelphia. Third series. Volume twenty-fifth. Edited by William Zentmayer, M. D. Philadelphia: W. J. Dornan, Printer. 1903.

Annual Report of the Surgeon-General of the Public Health and Marine Hospital Service of the United States. For the fiscal year 1902. Washington: Government Printing Office. 1903.

Medical Union Number Six. By William Harvey King. Sextodecimo, 60 pages. The Monograph Press, New York. 1904. (Price, boards, 35.)

MISCELLANY.

"THE Declaration of Independence," in colors with facsimile signatures, is being sent out by the Palisade Manufacturing Company, Yonkers. It is the design to reach every physician in the United States. We are requested to announce that if any are missed or should fail to receive a copy, the error will be corrected, if the company is notified. It is a souvenir worth possessing.

P. BLAKISTON'S SON & COMPANY announce that in printing all the copies of *Deaver's Surgical Anatomy*, so far demanded by its most successful sale, there will have been used 2,340 pounds of ink, 188,002 pounds or 84 tons of paper, and the printing press will have made 3,455,000 impressions. On and after July 1, 1904, the price of this work will be advanced to \$30 in half morocco, and \$33 in half Russia binding.

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The Scholar in Professional Life.¹

By FRANK HYATT SMITH, M. A., Buffalo, N. Y.

Members of the Graduating Classes: I deeply appreciate the honor conferred upon me by those who have invited me to address you on this interesting occasion. To this hour you have long looked forward and for it you have steadily prepared; and now in the presence of your honored instructors and of this great assembly of friends and observers, you, as graduates of the University of Buffalo, face with eagerness and enthusiasm the activities of the world in which you are soon to play an important part. He must be dull, indeed, whose mind in such an hour is not thrilled with subtle influences and mysterious emotions. The busy age, the manifold needs, the preservation of society, the transmission of character, the alleviation of pain, the permanence of truth,—these themes are both inviting and rewarding. It is, however, with a peculiar sense of obligation, that I have chosen as the topic of my address, The Scholar in Professional Life.

It is the glory of Francis Bacon, the founder of empirical philosophy, that, in his catalogue of sciences, he gave the highest honor and place to those that have to do with the physical well-being of man. You will leave to others the subtilities of learning, the speculations of dogmatists, the measurements of distant worlds; it will be your great province to lengthen and maintain life, to dispel suffering, to extinguish disease, to overcome contagion, to war with pestilence, to compound remedies, to devise sanitation, to improve hospitals, to relieve the injured, to amend tenements, to make constant researches into the origin of pain,

1. An address to the graduating classes at the 58th annual commencement of the University of Buffalo May 3, 1904.

the structure of the body, and the cure of human ills. I heartily congratulate you on the opportunities before you. There was a time when medicine and surgery and pharmacy and dentistry were fettered and under opprobrium. The greatest discoverers to whom you owe your proficiency, men of whom the world was not worthy, have been satirised and ostracised and persecuted; they endured the bigotry and ignorance and tyranny of those who knowing nothing fancied they knew all.

"How few think justly of the thinking few,
How many never think who think they do."

But the world moves and your scientific inquiries will be free as the air and wide as the sea. Each new day startles us by its possibilities; the chemist is everywhere sought; minerals hitherto unknown and vegetables before despised, are yielding medicines for men's sickness, tonics for their weakness, balms for their pains. The state itself is assisting to eliminate, if possible, the ravages of cancer and consumption, and lately listened with respect to the appeal of one of your noted instructors for the maintenance of a fund for this sublime end. The paradox of yesterday is the commonplace of today. We have new alchemists who transmute radium into helium, extract from the clouds vitalising forces, and in the solitude of the laboratory delve into the mysterious cellular relations of life. Dentistry has made a marvelous advance in the last twenty-five years and American practitioners lead the world. It was an American dentist who assisted the first lady of France in her dire misfortune. The care and preservation of the teeth is now of universal importance, and the army must have its dental corps. To explain the origin of a tooth formation, to devise a dental improvement, to arrest decay,—these are quite as noble as to tunnel a mountain or bridge a stream. To Victoria's physician we owe her matchless services; to King Edward's surgeon the British nation owes its present ruler. And in the hour of our own calamity, when a great leader was stricken by the assassin, it is the honor of this University that to the members of its Faculty the distinguished sufferer was at once entrusted for surgical aid. "Peace hath her victories no less renowned than war."

Much is said in our time of the strenuous life. Patriotism is too frequently estimated by sword and shell. The greatest forces are silent. The flowers offer no advertisement and the sun beats no drum. The world contains no higher patriot than the obscure and faithful physician, removed from the struggle of commerce, disdaining rest and sleep, the willing servant of the unfortunate and depressed, hiding his own sorrows, bearing others' burdens,

and bringing health and good cheer to hundreds who forget what is his due. His close ally is the accurate pharmacist, with a pitying eye for the delusions of men, busy at the prescription counter when society is wasting itself in dissipation, and exact in his selections and weights when a single error would cost a life. The teacher fills the brain with ideas, but the dentist fills the mouth and makes the orator and singer possible. Nor dare I omit a tribute to the trained nurse, whose sagacity, serenity, courage and devotion have made her a necessity in the sickroom and in the hospital, on the field and in the camp. Policy asks is it popular, avarice asks will it pay, society asks is it fashionable, duty asks am I needed. A few rain drops frighten a congregation; a pestilence attracts a doctor. People will weep over a melodrama and then run away from a train wreck; the intrepid surgeon and the undaunted nurse, with instruments and bandages hurry to the scene of horror, and there remain until the last sufferer is relieved. We have too many churches and too few hospitals.

The Good Samaritan, who saw the stranger on that Jericho road, ran to him, poured in oil and wine and bound his wounds, placed him on his own beast, and carried him to an inn,—he is your model for all time. No man asks his creed or his politics or the cut of his coat. He did, while others only gazed. He has neither name nor title in the record. But he was the first emergency hospital and will be revered when Wall street is forgotten. Your watchword is duty, the noblest word in any language, and fast becoming lost from the average lexicon. I urge you, by example and precept, by the traditions of your great profession, by the memories of your instructors, to love your work for humanity's sake, and, like the Great Physician, go about doing good. Your reward must come from within.

There can be no adequate compensation for a life saved. Milton received less than a hundred dollars for the great epic, but it seems to last. Pure disinterested labor is now rare. I wish that you might find an antitoxin for the fever for gold that possesses the nation. Do all you can to recall the old Spartan simplicity of life and manners. Send your patients out into the woods, where trusts and skyscrapers and trolleys are unknown. In the zeal for culture we have forgotten our courtesy, we can name the latest novels but not the ten commandments, men and women go from fad to fad in feverish haste, and suddenly drop at an age when their parents were ripe.

Each century has its distinguishing characteristic. We live in a period when every theory finds its advocate and the wildest delusions prevail. Let a saffron cloaked apostle of some East

Indian cult from beyond Madras, with flowing locks and sandalled feet, suddenly appear in the American Athens, announcing that he would give away a vial of the river of paradise, and confer immortality on all who would pay his extortionate rates, the streets would be thronged with eager disciples and female clubs would be emptied to crowd his lectures. Esau sold his birth-right and the soberest men and women are willing to part with their endowment of common sense for the merest bauble. Only horses and dogs refuse patent nostrums. I mention this singular tendency of our times because you will have to meet it in your work. It is the outcome of an age of inquiry. There are hundreds who deny the existence of matter and disease. With such all argument is futile.

To those who refuse all curative agencies and disdain the healing properties of the drugs with which the Creator has filled the earth, it should be sufficient to quote Friar Laurence in the play of Romeo and Juliet, as he gathers his medicines in the early morning :

"I must upfill this osier cage of ours,
With baleful weeds and many juiced flowers:
Many for many virtues excellent,
None but for some and yet all different :
O, mickle is the powerful grace, that lies
In herbs, plants, stones, and their true qualities:
Within the infant rind of this small flower
Poison hath residence and medicine power."

We might, indeed, paraphrase Shakespeare again and ask with genial Falstaff: "Can mind set a leg? No. Or an arm? No. Or take away the grief of a wound? No. Mind hath no skill in surgery then? No." The record of the creation gives us the first instance of the use of anesthetics, for before the Creator made woman from the rib of man, He put him in a deep sleep. When King Hezekiah was sick unto death they laid figs on him and he recovered; they did not appeal to mortal mind. The minister sees men at their best, the lawyer sees them at their worst, and the doctor sees them as they are.

You will need and I trust acquire a broad and catholic charity for people, who are largely as they are made. One failure of yours will be remembered more than ten successes. You will be summoned by those who do not need your services, and be attacked for telling such the truth. Often you will be dismissed for trivial reasons by persons whose tastes change with the wind. In all such crises bear yourselves with dignity and charity. Good wine needs no bush. If men like an impostor, let another have that

unenviable name. Boy healers and hypnotic manipulators and mental transformers and immortality venders and absent-thought-current originators, like Judas, find their own place. There is nothing new under the sun, and all these were anticipated centuries ago. Dickens portrays such in the exquisite satire of Bob Sawyer and his partner. Could that unrivalled master of fiction rise from his grave and devote one work to the elimination of all the quacks in the medical world, they would melt into air, thin air. I sometimes think that like mosquitoes they might be dispelled by coal oil, liberally used.

In all your development be modest. It was remarked of the great oculist, Cornelius R. Agnew, that he was so unassuming that he was often taken for his assistant. Simplicity is greatness. Humility is the portal of achievement. Bacon tells us that the kingdom of science, like the kingdom of heaven, must be entered in the spirit of a little child. The pompous politician and clergyman and lawyer and physician are alike repelling. "Knowledge is proud that he has learned so much: wisdom is humble that he knows no more." Five smooth stones from the brook slew the giant. Cultivate industry, integrity, economy, courtesy and skill, and you will surely win. Your skill will increase with years.

In the Norse legend, Thor the strong man went to the palace of the gods in the twilight land. There he boasted of his powers. The king, to test him, brought out a dwarf to wrestle with the stranger, and the dwarf threw him at the first round. Then he asked him to run a race with an old woman, and she reached the goal before he had gone a yard. Then he gave him a drinking horn to drain, but as fast as he drank its contents, it filled again. And at last he tried to eat a trough of meat but the trough was never empty. To the disconsolate Thor the king cried, "O! Thor, when you wrestled with the dwarf you wrestled with fate; when you raced with the old woman you raced with thought; when you sought to drain the horn you sought to drain the sea; and when you attempted to eat the meat you were trying to overcome the grave which is always filling." This should teach us the value of moderation. "*In medio tutissimus ibis.*" Cultivate a judicious silence. You will be the custodians of the most sacred family relations. Never betray them. A gossiping doctor is an abomination. The Divine Physician was silent when praised, silent when blamed, silent when He wrought His cures, silent when all men talked. Silence conserves energy.

This is an age of specialists. The average in every department of human endeavor is rising so fast that more and more men are devoting all their time and talents to one work. I am not certain that this is an auspicious sign. The eye of the special-

ist is like the lens of the microscope, fine in its distinctions but narrow in its range. Emerson tells us that a man is the prisoner of his power, and that the farmer becomes a spade and the banker a coin and the clerk a ledger. You see the danger. It can only be corrected by wide reading and an active interest in the general life of men. If you give your attention to but one department of your science, do not let it master you. Everett said that Washington was a sphere, all points of which were equally distant from the center. Thorough cultivation now is very rare and the world is full of angular and fractional men. Edmund Burke said that he could learn something new from every man. Try to know something of everything and everything of something. Break up the monotony of your professional life by little excursions, side avocations; interest yourselves in the arts, give your spare time to the best reading.

To a physician, Dr. John Brown, of Edinburgh, we owe some of the finest stories in the world. To that great doctor and writer of the 17th century, Sir Thomas Browne, the world is indebted for that masterpiece of quaint philosophy and subtle thought, "The Religio Medici," which every doctor should own and read. It is a treasure house of information and delight. Keep up your acquaintance with the classics for they are the avenues to culture. Perhaps there may be a Weir Mitchell among you who shall produce a great novel in the years to come. Try to make utility rather than personal gain the end of your labors. Wherever one looks the aim of human endeavor seems to be the dollar. In Milton's great epic we read that Mammon was "the least erected spirit among those that fell from heaven," and I urge you by your example to show the world that pure disinterested philanthropy still exists. It is the glory of the medical profession that with rare exceptions its members have wrought for general good and not for individual gain.

In these sordid days it is to the physician if to any one that men look for sacrifice and duty at any cost. Yet the laborer is worthy of his hire and the state should make the physician secure of his compensation. Chaucer in describing the doctor of his day gives us the subtle touch:

"For gold in phisik is a cordial,
Therefore he lovede gold in special."

Ninety-five per cent. of the people judge you for what you appear and five per cent. judge you for what you really are. Therefore cultivate neatness in dress at all times. Careless manners and untidiness are bars to recognition. Be content to wait patiently for success. I knew of an American dentist who began his prac-

tice in a German city. He secured an office on a prominent street and waited. Day after day he went down and no caller came. Months passed and he was in despair when one morning to his surprise a member of a noted family rang his bell and entered. Without a tremble he took his blank book, scanned its vacant pages and said: "Madame, I shall have to put your engagement ten days ahead; can you come at that time"? That man was a hero indeed. The tide turned and now he is rich. A. T. Stewart, the great merchant of New York City, in his early days had a very small business. He induced a wealthy customer to help him by allowing her carriage to stand at his door whenever she was in his vicinity. A word to the wise is sufficient.

I am not sure that your profession is without the jealousies that generally prevail wherever competition is strong. You cannot afford to speak ill of any man. When Edmund Burke was attacked in Parliament he replied, "no gentleman will insult me; no other can." All through life expect unjust and critical comment from those who differ from you in training and belief. Remember the race horse; keep trotting and the mud will dry and drop off. We waste much energy slapping mosquitoes. You are to battle with disease and not with petty slanders. Hold your minds open to all discovery even if you are compelled to recast your early views. Lord Kelvin says that it does not now become a man of science to doubt the possibility of anything.

"Be not the first to cast the old aside:
Nor yet the last by whom the new is tried."

The world is divided into two great classes: those who receive only what is new and those who reject what is old. Between these are the safer men who prove all things and hold fast to that which is good. Unfortunately, we are all bound by the chain of prejudice and our emancipation is slow.

That great philosopher Sam Weller said: "He is a man of science which is the mother of invention and knows no law." Men of science are not always models of toleration and liberality. The mathematician said that the *Paradise Lost* did not interest him for he could not multiply it; and the rhetorician replied that he despised algebra for it would not rhyme. Paley assures us that nothing has so retarded the progress of the human race as this principle,—contempt prior to examination. The fly on Saint Peter's dome sees but the smallest segment of the arc. "Behold we know not anything." Newton and Kepler were abashed in contemplation of the realms of knowledge they had not explored; it would not be difficult for us to find men who eagerly report each discovery that they make, or think they make,—to the press.

I do not think I transcend the limits of this address if I ask you to cultivate a reverence for the human body. Familiarity too often breeds contempt. The chemist sees only perfume in a flower, the lumberman notices only the girth of the tree, the electrician cares only for Niagara as a water franchise, and the anatomist is tempted to regard the body as material for operation and experiment. "We touch the Creator when we touch the body that He has made," said Richter. Coarse and brutal references and jests are least becoming in those who, most of all men, know the capacities and possibilities of the wonderful temple that we inhabit. When John Hunter was taunted by a professor for his ignorance of Greek, he said to his student, "go tell that man that I can teach him on the dead body what he never learned in any language living or dead." Delicacy and tenderness may not always be possible for you, but when they are remember to make such prominent. Roughness is no essential to success anywhere. The age is so intense and nervous that your function will be that of the balance in a watch, to ensure steadiness and tone.

I congratulate the ladies who have mastered their branches and are to demonstrate their ability with men. When Wendell Phillips demanded the right of women to enter the professions, thirty years ago, he was ridiculed in Boston. But he was a prophet as well as a reformer, and today we see Portia at the bar, Helena in the sick room, and Ida in the college. As Dante estimated his successive steps in Paradise by seeing the face of Beatrice in ever lovelier beauty, so the world now measures its advancement, not by inventions nor by cities, but by the force and grace and power of woman, once man's toy and drudge. Dryden tells us that a laugh is a good thing at any rate, and a straw if it tickle a man becomes an instrument of happiness. Your profession, more than all others, will require cheerfulness. A smile is often an excellent prescription and geniality is tonic to the sick. We allow other men to croak with their pessimistic complaints, but we expect the doctor to be the cricket on every hearth. What a robust optimism, what infinite stores of humor, what a perpetual fount of happiness he must be compelled to carry or assume. All draw upon that bank, yet it never suspends. And in times of great scourge, when society flees, and business closes its doors, and the court and church and school are empty, you will steadily pursue your daily and nightly round, the hope of the stricken and the friend of the dying, defying weather and pestilence and contagion, and some of you may be martyrs unsung in verse and unhonored in prose. This gives to your work its crowning grandeur. He that saveth his life shall lose it. The aggregations of capital, the achievements of commerce, the pro-

fits of banking, the wiles of the statesman, the possessions of the miser, the contentions of nations—all terminate on self and fade as the grass: while a single such hero as William MacLure, battling with disease and death among the simple farmers of the Glen, to whom the sight of his white mare wakened courage and hope, and at last borne to his grave through drifts of snow by stalwart men bowed in tears,—writes his memory in the human heart and is mourned by hundreds who say: “I was sick and he visited me.”

To relieve human misery,—this is the aim of the scholar in medical life. Behind the foreground of your professional skill there must be the background of your personal character. Shadow is proportional to height. The foundation of all art is moral. Space has three dimensions; life has four,—length of days, depth of conviction, height of aspiration, and breadth of sympathy. When these are symmetrical you have a man. Let not your left hand know what your right hand does. Proficiency needs no advertisement. Let it be said that you are true men and women of purity, sincerity and elevation. Then your influence will be as pervasive as the air and as healthful as the light. You go forth from a university rich in its past and auspicious in its future, including many names justly known and widely honored. It looks to you to perpetuate its fame. Be loyal to your profession, to your instructors, and to yourselves. Then, whether your career be long or short, prominent or secluded, you will have the consciousness of a life well spent which is its own sufficient reward.

20 HUNTINGTON AVENUE.

Dropsy; Its Therapeutics.

By FRANK F. HOFFMANN, M. D., Chicago, Ill.,

Surgeon to American Hospital and Frances E. Willard National Temperance Hospital.

DROPSY is a collection of fluid in any of the cavities or the cellular tissue of the body, and may be conveniently classified as edema, anasarca, ascites, hydrothorax, and hydropericardium. Although usually an acquired condition it may be congenital. In this discussion, however, we will refer only to acquired dropsy due to cardiac, renal, hepatic, or peritoneal disease. The dropsy of cardiac disease may be of acute or chronic origin. Effusion into the pericardium may result from an acute pericarditis, usually of rheumatic character, or it may occur in the course of chronic cardiac or renal disease. Dropsy due to valvular lesions of the heart usually occurs at a late period when

compensatory disturbances have set in, and is generally complicated with renal disease.

In hydrothorax, due to acute pleurisy, the fluid is at first of a thin serous character, and later becomes serofibrinous. Aside from those cases in which the pleurisy is due to exposure to cold or complicates pneumonia, it is frequently of tuberculous character. The latter variety is apt to develop insidiously, and the exudate is liable to assume a purulent nature. Acute infectious fevers may also be accompanied by hydrothorax. Chronic hydrothorax may be a sequence of an acute pleurisy, or it may be of tubercular origin, or a late complication of diseases of the heart or kidneys. Ascites or hydroperitoneum may be due to peritonitis, Bright's disease, cirrhosis of the liver, or valvular lesions of the heart. It is apt to be especially marked in hepatic or renal disease.

General dropsy, or anasarca, is not apt to occur in cirrhosis of the liver, but it is very common in renal affections. In cases of valvular lesions of the heart we may get a general edema independent of disease of the kidneys, although chronic nephritis is present in 70 per cent. of the cases. I recently observed a case of cyst of the gallbladder in which adhesions had taken place and in which the diagnosis from ascites was somewhat difficult. The nature of the case, however, was established by an exploratory aspiration, which revealed the presence of bile. Chylous ascites is a peculiar condition not due to obstruction of the portal circulation, but to a rupture of the thoracic duct, caused by ulceration, cancer, or the like. Chylous fluid may also enter the pleural cavity, usually on the left side.

With regard to the treatment of dropsy it must be remembered that it is not a disease but a symptom, although it often assumes an importance sufficient to make special treatment necessary. We must remove the cause if possible. In acute inflammatory affections of the heart and pericardium, I have often been able to witness a control of the inflammation in from 6 to 15 hours upon giving the tincture of bryonia, one drop every two hours, or three drops of the fluid extract; and in such the condition did not become chronic. As this article is limited to the discussion of dropsy, I shall not, however, enter into the treatment of those diseases of the heart, liver and kidneys of which it is a manifestation.

Where the effusion is localised, as in hydropericardium, it may be necessary to aspirate, which is best performed in the fourth interspace, about two inches to the left of the sternum, always after the most thorough antiseptic preparation. In effusions into the pleural sac thoracentesis may be required if medic-

inal treatment fails, and this is to be followed by strapping the chest.

The indications for abdominal paracentesis are large effusions with dyspnea, pain and cardiac disturbances. It should be performed a little to one side of the median line and about three inches above the pubes, if necessary, first aseptically catheterising the bladder. Aside from the mechanical removal of dropsical effusions we may resort to elimination by way of the bowels, the skin, and the kidneys, or to a combination of these measures. Elimination by way of the bowels may be accomplished by the administration of salines, such as epsom or rochelle salts, in doses of two drams every four hours, or with compound jalap powder or calomel. Other drugs for this purpose are elaterin, 1-10 grain, or extract of elaterium, 1-6 grain, once or twice daily, or croton oil in one drop doses pro die. These powerful evacuants should be reserved for cases in which the dropsy requires urgent removal, as in renal affections. Elimination through the skin is best promoted by hot tub baths or vapor baths, assisted by hot drinks.

In most instances, however, the use of diuretics is necessary, and we must distinguish between those which act upon the heart and arterial system, and those which act directly upon the kidneys. The selection of one or the other class will depend, of course, upon the cause of the dropsy. If it is of cardiac origin, the remedies selected should be those which are known to regulate the action of the heart and to increase the arterial tonicity and thus improve the circulation. On the other hand, if the dropsy is due to advanced renal disease it is important to exclude from the treatment those drugs which act directly upon the kidneys, in order to avoid any increased irritation of organs already functioning badly. Among the cardiac diuretics, so-called, digitalis is the most prominent. The infusion is commonly employed in doses of one-half to one ounce, and the best results are obtained in cases in which the pulse is rapid, weak, and irregular. After its effect has manifested itself it may be continued in half ounce doses, *t. i. d.*, for some time, always discontinuing its use if nausea appears.

Strophanthus may also be carefully employed in doses of one to four minims of the tincture, until the heart's action becomes regular. Its use should be suspended if headache and a sense of constriction manifest themselves. Convalleria is also recommended by some authors, its action upon the heart resembling that of digitalis. Caffein enjoys some popularity as a diuretic, and acts both upon the heart and kidneys. It may be given in doses of one to three grains, every four hours, and continued until free

diuresis is produced, when it generally loses its effect. Squills is an oldtime diuretic which sometimes acts satisfactorily when digitalis fails. Its effect is exerted both upon the heart and kidneys, and in cases in which the latter are diseased it must be used very cautiously.

Among the diuretics which act directly upon the kidneys we have the alkaline vegetable salts, such as the bitartrate, acetate, or citrate of potassium. These seem to promote elimination by stimulating the renal circulation and increasing osmosis. If employed in moderate doses they are usually well tolerated, and are often combined to advantage with the cardiac group of diuretics. Other renal diuretics are polytricum, in 30-drop doses of the tincture, which I have found of value in the dropsies of cardiac origin; juniper, turpentine, and copaiba, the last three, however, being rarely employed owing to their irritating effect. The best type of renal diuretics is represented by theobromine and its derivatives. Their action seems to be exerted directly upon the renal secreting structures, without any influence upon the heart or general circulation, and for these reasons they have been largely employed in dropsy of cardiac affections and of those chronic renal troubles in which the function of the kidneys is not too greatly injured.

Theobromine itself is quite irritating and is liable to cause gastric disturbances, and on account of this theobromine sodium salicylate has largely taken its place. As the salicylic acid in its composition, however, is not free from irritating effects upon the kidneys and stomach, a still more eligible method of administering theobromine is theobromine sodium acetate, or agurin. In this drug the influence of theobromine is supplemented by that of the acetate of sodium, which, as already said, is in itself an excellent diuretic. The following case will serve to illustrate the action of agurin.

J. S., 38 years old, suffered from organic heart disease, with edema and ascites three years ago. The stomach was very irritable. Convalleria was first given in 3-drop doses of the fluid extract, and this acted very promptly, increasing the elimination of urine to four times the amount within 24 hours. The dropsy returned at the end of six months, when a trial was made of agurin in 2-grain doses, three times daily. Its action was even more pronounced than that of convalleria, and in 24 hours the urine had increased from 600 c.cm. to 5,000 c.cm. This was followed by a slight decline, after which the amount again increased to the former level, remaining at 3,000 c.cm. for two weeks. The bowels were kept open with magnesium sulphate and podophyllin, these producing six to twelve watery stools daily. Under this treatment the dropsy completely subsided, and has failed to return.

In three other cases I observed the same marked results, excepting one with double cardiac aneurism and enormous hypertrophy of the heart, with irregular pulse. Here strophanthus, one-quarter drop of the specific tincture, was administered, after which agurin promptly increased the flow of urine.

In atrophic cirrhosis of the liver with ascites the effect of the agurin is not so rapidly developed nor so persistent, but under the administration of five grains, four times daily, for three days, in every case there was a gradual increase of the urine up to 5,000 c.cm., after which it dropped to 3,000 c.cm., and was kept at this level for some time by five grains given only at night. Abdominal paracentesis was also performed on a number of occasions, the amount of fluid removed varying from 1 to 4 gallons. One case left the hospital in six months able to resume his work, having been confined to his bed for two months during that period. The other patient left after three weeks' treatment, somewhat improved, and passed from observation. In hypertrophic cirrhosis of the liver with jaundice and with some effusion into the abdomen, agurin was equally efficacious. It seemed to have a beneficial effect also in passive congestion of the liver, probably by favoring elimination of toxins from the body.

In dropsical effusions in the pericardium and pleural cavity agurin is a useful diuretic given for some time in small doses. In a case of left-sided pleural effusion in which aspiration was performed, with removal of the serous fluid, the patient refused medication and the cavity rapidly filled again. In a second aspiration a serous fluid was removed, and the patient was now prevailed upon to take a tonic of cocoa wine, and was given agurin in 5-grain doses, four times daily. The urine almost immediately increased to twice its volume, and the diuresis was maintained for some time, a solid diet being given for a week. At the end of five days agurin was stopped. At that time the temperature and pulse were nearly normal, although respiration was still somewhat limited. The urinary quantity remained above the normal for several days after discontinuing the drug. The patient is now in perfect health.

In acute nephritis agurin is of no benefit, and its diuretic action cannot be depended upon. In a case under my observation of general anasarca with periodical attacks of uremia, agurin somewhat increased the quantity of urine without augmenting the percentage of albumin. It had no effect, however, upon the uremic seizures, which finally subsided under the use of hot baths and diaphoretic measures. In the acute exacerbations of chronic nephritis the results were similar, while in chronic interstitial nephritis a considerable increase in the amount of urine

voided was sometimes observed. From examinations of the urine during the administration of agurin I gained the impression that the solids were equally increased with the amount of fluid voided.

Briefly recapitulating my experience with agurin I would say that it is of special service in the dropsy of cardiac affections, sometimes useful in the ascites of cirrhosis and passive congestion of the liver, and also of occasional value for the removal of drop-sical effusions left after the subsidence of acute inflammations of the kidneys, as well as in chronic nephritis without marked structural changes. In hydropericardium and hydrothorax the drug also serves a useful purpose in promoting the removal of fluid with or without paracentesis. As already mentioned the administration of agurin should be combined with the use of cardiac diuretics, such as digitalis or strophanthus, and diaphoretic measures, such as the hot bath and the vapor bath, with hydragogue cathartics.

707 WEST WRIGHTWOOD AVENUE.

Intestinal Surgery.

A Case of Acute Intestinal Obstruction due to Perforation of an Inflamed Meckel's Diverticulum.

By MARSHALL CLINTON, M. D., Buffalo, N. Y.,

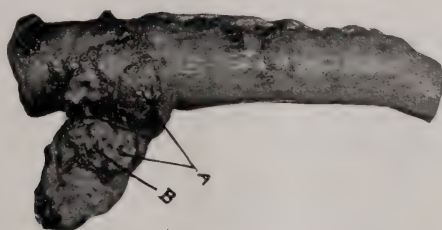
Attending Surgeon, Sisters of Charity, and Erie County Hospitals, Buffalo, N. Y.; Instructor in Surgery in the University of Buffalo.

IN itself Meckel's diverticulum is of sufficient rarity to attract the interest of the physician; when it becomes diseased it demands attention. We are frank to admit the difficulty in diagnosing the beginning point of many septic lesions in the abdomen before operating, just as it is difficult to determine the nature of the many masses felt in the belly before it is opened.

In cases of serious obstructive lesions of the intestine the safety of the patient depends on prompt operative intervention; such procedure being adopted with a clear view as to the condition, a full realization of its gravity and a well-defined idea as to methods to be adopted for its relief. Intestinal surgery means prompt and fearless intervention; delay in the majority of cases means death. The lesion undoubtedly would be discovered and removed but the patient would die, thus placing another case among the archives of the professional humorist for reference as an instance wherein "the operation was successful, but the patient died."

The case reported herewith is interesting in itself as an anatomic rarity; it is doubly interesting as illustrating a rare and unusual condition wherein prompt operation before serious damage had been done, was followed by complete recovery.

The patient, a man of 44, was admitted to the Sisters of Charity Hospital August 8, 1903, in charge of Dr. Borzilleri. He had been suffering with colicky pains in the abdomen for five days and had been constipated. For 48 hours prior to his admission to the hospital there had been no movement whatever. Thirty-six hours before his admission he began to vomit material made up of bile-stained mucus and stomach contents. His temperature was 100° F.; pulse, 112; respirations, 22, costal in type. His tongue was dry, the blood pressure was low and a leukocytosis (23,000) was present. The patient was restless and anx-



Photographic reproduction of Meckel's diverticulum. About one-half natural size. The diverticulum is partially coiled upon itself and cannot be seen in its entirety. It is about 50 per cent. longer and broader in proportion than shown in the illustration. A—Abscess. B—Perforation.

ious and complained of a constant pain in the abdomen. He could not locate the pain definitely, but when asked to place his hand where it was most intense, passed both hands with a sweeping motion all over the abdominal region, saying: "It's here." Examination showed a rigid abdomen, moderately distended. On gentle pressure the patient bitterly complained of pain in all regions of the abdomen, and especially was this so over the lower quadrants of both sides.

From the history and examination a diagnosis was made of obstruction due probably to a perforative appendicitis with an advancing peritonitis. The patient was prepared for operation, the anesthetic used being ether. The operation was performed 17 hours after his admission to the hospital. The usual incision was made over the head of the cecum, which was easily reached and delivered into the operation wound. It was normal in condition as was the appendix, there being not the slightest sign even of irritation. Intraabdominal digital examination detected the omentum adherent to a mass on the side near the middle line in the upper left quadrant quite as large as a closed fist, but without any determinable characteristics of a marked type.

The appendical wound was rapidly closed and an opening made in the middle line 3 inches in length. A few coils of distended small intestine floated into the wound. Following the course of this gut downward the previously discovered mass was disclosed. It was covered with omentum. The outer wall was formed by a coil of ileum about 8 inches long, which at each end was sharply flexed on its axis and densely adherent to the base of its mesentery. It was dark and edematous, but not gangrenous. Gentle separation of the adhesions with the fingers was followed by a thick flow of pus from a small abscess under the omentum and between the two sides of the coil of small intestine. The abscess cavity was cleansed and in it lay a Meckel's diverticulum $2\frac{1}{2}$ inches long and $1\frac{3}{8}$ inches in diameter, coiled on itself and with a perforation in its distal extremity. This diverticulum was found to spring from the ileum several feet away from the obstructed coil. The contents of the distended intestine were carefully milked into the healthy gut below the diverticulum.

The diverticulum with the adjacent inflamed and edematous intestine was resected and the free ends of the intestine joined with a Murphy button. There was persistent capillary bleeding from the abscess cavity and a small drain was inserted at the base of the infected mesentery, about which the abdomen was closed. The recovery of the patient was rapid and uneventful and on discharge from the hospital he returned to his work, that of a laborer. Since the operation he has gained over thirty pounds in weight and generally feels better than he has for several years.

Aside from the unusual features of the case in its anatomic phase it is remarkable in that all the symptoms were those of a chronic appendicitis with eventual perforation of the appendix and resulting peritonitis. The man's every symptom was typical of the appendical picture, and the case accentuates the belief that there are probably many cases of supposed appendical trouble resulting fatally under prolonged medical treatment which are not appendical at all, but due to some anomaly of the intestinal tract.

466 FRANKLIN STREET.

RHEUMATIC DYSMENORRHEA.

R	Am. hydrochlor.....	$2\frac{1}{2}$ ozs.
	Tr. stramonii.....	$\frac{1}{2}$ oz.
	Tr. cimicifugæ.....	1 oz.
	Syr. glycyrrhizæ.....	2 drms.
	Tongaline.....	6 ozs.

M. Sig.—Teaspoonful three times a day.

SOCIETY PROCEEDINGS.

Roswell Park Medical Club.

Regular Meeting held May 2, 1904.

REPORTED BY GEORGE F. COTT, M. D., Secretary.

NOTE ON THE USE OF IODINE AND ITS COMPOUNDS.

Dr. L. BRADLEY DORR, of Buffalo, presented this subject for the consideration of the club, saying that his object was to draw attention to some experiences with the iodides and iodine in diseases and conditions not of syphilitic origin. He said: Some years ago I got a hint from a physician who was very successful in treating Bright's diseases, especially contracted kidney. He employed bichlorid of mercury and nitric acid, as the chief remedies in these diseases with a great deal of success. After using this plan of treatment for some time I substituted the protoiodide in order to obtain a greater amount of toleration by the patient than I could with the bichlorids. As these cases are for the most part chronic, it is essential that the treatment should be of a nature that can be tolerated for a long time.

I have given $\frac{1}{4}$ grain of mercury protoiodide four times a day for six months without any salivation or other inconveniences to the patient. It acts as well in acute cases of nephritis as it does in the chronic forms, and has been the most efficient remedy I have ever used in the acute cases. I have had several cases of contracted kidney in the advanced stages, accompanied with the symptoms of dropsy, shortness of breath, headaches, edema of the lungs and impaired vision. Under ordinary treatment my experience shows that these cases do not usually live more than two or three months, but with the protoiodide treatment they all have improved, the dropsy disappearing and all the other symptoms becoming so much better that the patients have resumed their duties and have lived in comparative comfort. Two cases died, one in two years after beginning treatment and one in twenty-nine months afterward, both from degeneration of the heart muscle. I have used as symptoms indicated, nitroglycerine, squills, salts, digitalis and sweat baths. In cases where the mercurial symptoms began to appear I have substituted Burnham's soluble iodine in 5-drop doses, three times a day.

DISCUSSION.

Dr. J. C. THOMPSON: This subject is in line with general practice and the suggestion is of value and help in our daily

work. Personally, I have had no experience with Burnham's soluble iodine, but protoiodide I have used quite extensively. I recall a case in which I gave two grains a day in eight doses of $\frac{1}{4}$ grain each for over a month, without any untoward effect. I used Parke, Davis & Co.'s preparation. You may give eight or nine tablets daily and gradually work up to the limit of toleration until the gums become sore or the teeth tender. To establish tolerance, I frequently give from three to five tablets at a time. I would like to ask Dr. Dorr if the treatment is good in slight cases of albuminuria?

Dr. J. E. KING: I wish to inquire further as regards toleration. Potassium iodide is a favorite with me; however, patients do not tolerate it very well. I use it in combination with nitroglycerine. Five grains of potassium iodide often leave a decided metallic taste and sometimes other specifics of iodine will do the same. When Burnham's soluble iodine was introduced, I used it in a case of asthma with not very encouraging results. I would like to know the toleration of soluble iodine.

Dr. THOMAS BAGLEY: Iodine is our great standby in typhoid fever. Bartholow's formula of carbolic acid and iodine certainly gives good results; symptoms all improve rapidly. I also use topical applications of the iodine to the cervix, mixed with glycerine and carbolic acid. Protoiodide of mercury in specific cases acts well. In one case I gave $\frac{1}{4}$ grain three times a day for a year and a half with complete recovery. I have also used potassium iodide in asthma with good results. In typhoid fever I give three or four drops of soluble iodine to two drops of carbolic acid three or four times a day. I would like to ask Dr. Dorr if he has used it in diabetes.

Dr. W. E. DIGNEN: Iodine is one of those drugs we use frequently, but whose results must be watched as they vary in different people. In one case I gave large doses of iodide of mercury. In a short time the teeth became loose. It was altogether the worst case of syphilis I have ever seen. I stopped the iodide for a few days and put the patient on a milder preparation. In three weeks time the ulcer healed. In a case of Bright's disease with a bad heart, the patient, having had a second attack of apoplexy, did well on soluble iodine three or four times a day. It may be given in increasing doses. Soluble iodine is a good preparation and doesn't disagree with the stomach.

Dr. T. H. MCKEE: I must confess that my experience regarding the therapeutic application of iodine is confined to surgical and specific diseases. In the former I have used it in the form of iodide of potash to combat the effects of intracranial

traumata, because it is considered the proper thing to do. The patients improved, but whether their gain was due to the medication in any measure, I do not know.

Apròpos of the use of protoiodide in specific cases, it is frequently next to impossible to reach and hold such patients to the physiological limit without first resorting to some more rapidly acting form of the drug, for example, the ointment. After having established the limit, they can be held with the tablets. Too often these are more or less insoluble, and that undoubtedly accounts in many cases for failure to get results. It would be of the greatest interest to know whether or not some of the striking results obtained by Dr. Dorr may not have been due to a specific condition of long standing and of which there existed unrecognisable clinical conditions. When one remembers that about one in eighteen of the general population are troubled with syphilis, it begets an attitude of suspicion toward all obscure cases, and particularly those which improve under such therapeutic measures as these under discussion.

Dr. G. F. COTT: Next to silver, iodine is the most useful drug. We must, however, ascertain the condition existing before the drug may be given with benefit. The late Dr. Pepper once wrote that a patient suspected of syphilis to whom iodide of potassium is given, and it is not tolerated, the evidence is conclusive that syphilis does not exist, but if he tolerates it he certainly has the disease. This statement aroused much controversy and the assertion was finally withdrawn. Syphilis in its different stages is a complex condition. Mercury will improve the second stage and not the third. Potassium iodide will improve the third stage and not influence the second. Iodine will not have much effect in the third stage when the body is much below par. It is sometimes difficult to select the proper combinations with iodine, for they do not act equally well.

That iodine is effective in conditions other than syphilis is amply shown. It influences glandular swellings, and mucous membranes as well. A peculiar condition is observed in testing syphilis which had not previously been treated with mercury—namely, that the iodine does not seem to exert its proper proportion of influence but will do so as soon as the body has been brought thoroughly under mercury. Schwab and Levy-Bing are now treating the newborn with soluble mercury injections of the biniodid, $\frac{1}{2}$ milligram from 22,000 to 35,000 grams body weight; giving 10 to 15 injections and resting 15 days. They claim excellent results. The combination of iodine and mercury seems in many conditions to exact a more powerful influence than either drug alone.

Dr. DORR in closing said: Any kind of manufacture may be used. However, the best preparation is the tablet triturate. Protoiodide seldom causes diarrhea, but if its use is kept up it frequently stops it. I have had a case of acute nephritis with dropsy, headache and nearly total suppression of urine. Protoiodide relieved all symptoms quickly, as it also does those secreting large quantities of urine with slight albumin. In one case there was a discharge of nearly a gallon of urine a day with slight albumin; this patient also got well under iodine treatment. The patient was pregnant at the time, but took the iodine through to term. I have had no experience with iodine after labor. In polyuria, iodine is just as efficient; also in contracted kidney with little albumin.

Regarding toleration of iodine, some patients cannot stand any kind in any dose. Metallic taste in the mouth is frequent. I recall a remarkable case of iodine toleration in an asthmatic woman. I gave her four grains of potassium iodide. In a few hours an eruption of urticaria appeared. Later my father gave her an eight grain dose with a similar result, and still later I think another doctor gave her sixteen grains to the dose with a like result.

I have had the treatment of typhoid by carbolic acid brought to my attention, but am not familiar with it. As regards the physiological dose of soluble iodine, one patient took ten-drop doses without any bad effect. Dr. Marchand, of New York, has acquired a reputation all over the country for his treatment of Bright's disease with bichloride of mercury and nitric acid. Marchand's dose is: bichloride of mercury, 1-60 gr. and dilute nitric acid, three drops, three times a day. Nitric acid probably acts like nitroglycerin, by reducing the amount of albumin. I give ten drops four times a day of the standard solution of nitroglycerin.

Alumni Association, University of Buffalo — Department of Medicine.

Twenty-Ninth Annual Meeting, May 3, 1904.

REPORTED BY THOMAS H. MCKEE, '98, Secretary.

MORNING SESSION.

The morning session was held in the college building and was devoted to registration and class reunions, opening at 9.30 a. m. The following mentioned classes held meetings: '54 in the faculty room, John G. Collver, president, Waterford, Ont.; '64 in the library, Clayton L. Hill, president, 321 Franklin street, Buffalo,

N. Y. ; '74 in the museum, Edward N. Brush, president, Sheppard and Enoch Pratt Hospital, Towson, P. O., Md. ; '84 in the amphitheater, Charles S. Payne, president, Liberty, N. Y. ; '94 in alumni hall, Myron E. Fisher, president, Delevan, N. Y. These reunions adjourned at 11 a. m. to attend the commencement exercises, held at the Teck Theater.

AFTERNOON SESSION.

The regular session was called to order in Alumni Hall by the president, A. W. Henschell, of Rochester, at 2.30 o'clock, May 3, 1904.

After hearing the minutes of the previous session, and receiving reports of various committees, the president appointed the nominating committee as follows: William Warren Potter, '59, Buffalo ; Edward N. Brush, '74, Baltimore, Md. ; Fridolin Thoma, '87, Buffalo. The committee reported later as follows:

To the Alumni Association, University of Buffalo:

Your committee of nomination begs to report as follows: for president, De Lancey Rochester, '84, Buffalo; for first vice-president, Fridolin Thoma, '87, Buffalo; for second vice-president, Henry T. Benham, '90, Honeoye Falls, N. Y.; for third vice-president, Jane W. Carroll, '91, Buffalo; for fourth vice-president, G. A. Himmelsbach, '91, Buffalo; for fifth vice-president, C. J. Reynolds, '90, Buffalo; for secretary, Thomas H. McKee, '98, Buffalo; for treasurer, H. K. DeGroat, '97, Buffalo.

To fill vacancies on the board of trustees: Robert P. Bush, '74, Horseheads, N. Y., vice William Warren Potter, resigned; A. W. Henschell, '89, Rochester, vice D. A. Currie, term expired.

For members of the executive committee: Albert T. Lytle, '93, chairman, Buffalo; Grover W. Wende, '89, Buffalo; Franklin W. Barrows, '93, Buffalo.

In submitting the foregoing report your committee desires to supplement it with the statement that the address of the president was listened to with interest, particularly that portion referring to the apparent lack of interest in the annual meetings. Your committee feels that the condition referred to is more apparent than real, and that it does not indicate a waning affection on the part of the graduates for their Alma Mater.

The committee feels all that is needed is something to awaken an increased interest in the annual sessions, and that the suggestions of the president are of decided value in this direction. It, therefore, recommends that the executive committee confer at an early date with the faculty with a view of making a session of at least three days duration for the next reunion, and that the

suggestions of the president as to clinics and other matters be given the weight which their importance seems to justify.

Respectfully submitted,

WILLIAM WARREN POTTER,
EDWARD N. BRUSH,
FRIDOLIN THOMA.

On motion of Dr. Thoma, seconded by Dr. Brush, the report was received, adopted, and the nominations were confirmed.

The auditing committee, Franklin W. Barrows, Elmer G. Starr, and Jane W. Carroll, reported as follows:

MAY 3, 1904.

Your committee has examined the treasurer's report and the vouchers accompanying it and finds all accounts correct. We also heartily endorse the recommendation of the treasurer, that some action be taken that may render it unnecessary to carry the accounts of delinquent members from year to year.

FRANKLIN W. BARROWS, '93.
ELMER G. STARR, '84,
JANE W. CARROLL, '91.

The recommendation of the committee was discussed by Drs. Stockton, Currie, Lytle, and Rochester. On motion of Dr. Currie, seconded by Dr. B. G. Long, the treasurer was instructed to make the best settlement possible with members in arrears for dues.

Moved by Dr. Lytle, seconded by Dr. Stockton, that the executive committee be instructed to make arrangements for a three days' meeting in 1905. Carried. Dr. Currie suggested that the session begin one day before commencement.

The meeting was then presented with the regular program for the afternoon.

1. President's address, A. W. Henschell, '89. Discussion.
2. Tubercular pericarditis, Charles G. Stockton, '78, professor of medicine, medical department. Discussion.
3. The suprarenal gland, Frederick A. Busch, '97, professor of physiology, medical department. Discussion.
4. Excreted nitrogen, Herbert M. Hill, professor of chemistry, medical department. Discussion.

The paper entitled Recent studies on the tubercle bacillus and its relation to the tuberculosis problem, by Herbert U. Williams, '89, professor of pathology, medical department, was on motion of the author, owing to the lateness of the hour, indefinitely postponed. At the evening session the annual banquet was served at the Hotel Iroquois at 6.30 o'clock.

New York Odontological Society.

(From Secretary's Report.)

AT THE meeting of the New York Odontological Society, held at the Academy of Medicine, New York, Tuesday evening, April 19, 1904, EUSTACE H. GANE, Ph. C., read a paper entitled,

DENTAL APPLICATIONS OF SOME NEW OXYGEN COMPOUNDS.

After a brief mention of the value of solutions of hydrogen dioxide to the dentist, the lecturer drew attention to a number of new compounds which readily liberated oxygen. The first of these to be introduced was sodium dioxide which was valuable because it had a saponifying action in addition to its germicidal properties. Its caustic properties and the danger in handling it were serious objections to its general use. Attention was then drawn to the fact that hydrogen dioxide would unite with certain saline substances, forming a number of interesting compounds, the most valuable of which are the compounds with carbonate of soda and borax. The first compound would do all that sodium dioxide would do, and did not have the disadvantages of the latter. The borax compound was milder in its action and useful where a slow oxidising action was required. These compounds were at present in the experimental stage, but promised to be of value to the physician as well as the dentist.

The author then pointed out that more and more attention was being paid to mouth hygiene. Dr. William Hunter had informed us that many disorders of the stomach may be attributed to the irritation caused by swallowed pus. This may happen not only in cases of pyorrhea alveolaris, but also from diseases of the gums, stomatitis due to septic plates, and to the bridge and crown work now so much in vogue. More dangerous still are pus organisms associated with dental caries; no pus organisms being so virulent as those grown in necrosed bone. Given the necessary conditions, diminished resistance on the part of the tissues, the pus organisms taken in by the mouth may be disease-producing.

The problem, then, of the oral therapist was to discover some means of keeping the mouth in a clean condition. Tooth powders heretofore manufactured were of little value, as no anti-septic could be introduced in sufficiently large amount to do the necessary work without injury to the soft tissues, while liquid dentifrices were weak in cleansing properties and chiefly served by producing a cooling effect, to give a false impression of cleanliness. Here was the point where the chemist could come to the dentist's and physician's aid. Among the new oxygen compounds was one which had been found available in the highest degree for the purposes of mouth sterilisation. This was the calcium dioxide which, thanks to the development of the electrical industries at Niagara, could now be produced on a commercial scale. This

chemical added to a tooth powder base was found to give the powder properties hitherto thought impossible of attainment. In contact with the mouth fluids oxygen was liberated with the formation of milk of lime, an antacid as well as a germicidal action being thus attained. Moreover, in incipient dental caries where there were local acid areas this acid decomposed the calcium dioxide, liberating hydrogen dioxide at exactly the point where its germicidal properties were most needed.

By this means it was now possible to give to the patient a simple means not only of preserving the teeth from decay, but of preventing, to a large extent, the ingress of those pathogenic bacteria which frequently found a suitable field of development in the human mouth. An added advantage was the avoidance of the necessity of using a mouth wash as well as a tooth powder, something which is very difficult to induce the average person to do. The paper was illustrated with clinical experiments.

SELECTIONS.

Typhoid Perforation.¹

By LOUIS FRANK, M. D., Louisville, Ky.

IT IS only necessary to make a cursory view of the medical and surgical literature of the day to be impressed with the importance of the proper treatment of intestinal perforations occurring as a complication of typhoid fever. The advances in therapeutics have robbed typhoid of many of its dangers, until today under these improved methods of treatment, the mortality has been reduced to a little less than 10 per cent. Can this be lowered we ask ourselves? We think yes, in view of the fact that about 3 per cent. of all cases die of perforation. This means one-third of all the deaths in this disease is from the peritonitis consequent upon the escape of intestinal contents. We believe that one-half of such deaths could be prevented by proper surgical intervention.

The greatest stimulus was given to the surgical complications of typhoid by the classical monograph of Prof. Keen who at the time his work was issued, (and one, by the way, which every practitioner should read) was able to collect only 83 cases upon which an operation had been done to save the life of the patient. Of these 83, 19.3 per cent. recovered.² One year later 47 more

1. From *Louisville Monthly Journal of Medicine and Surgery*, March, 1904.

2. The Surgical Complications and Sequelæ of Typhoid Fever, by W. W. Keen.

cases had been operated, and the death rate had diminished considerably as 28 per cent. got well. In September, 1903, the writer was able to collect 339 cases with 90 recoveries.

One may say that this is little improvement. True, but as answer to this we can say that formerly these 90 cases would all have died and that many of these cases were operated upon even late after the perforation had taken place.

This danger is one that is always present, that we can never foresee, that we can not avoid, one which is likely to occur in the very mildest case as in the severest and which is at the same time, if not recognised at once and properly handled, the most fatal of any complication or accident in the course of the disease. Without surgical aid recovery from such perforation is so rare that we may say it practically does not occur. Admitting this we must conclude that we should endeavor (1) to recognise the very earliest manifestations of this accident, i. e., to make an early and correct diagnosis, and having done so, (2) to give our patient the advantage of proper surgical assistance. Early recognition and proper surgical aid go hand in hand, the one without the other is useless. Neither, however, should be difficult, and, in this day of surgery when good surgeons are found within a few hours distant from most all and every locality, there is hardly an excuse for not having the latter and we believe the former, that is, the early recognition, is within the possibilities of every practitioner if the proper interpretation is put upon the symptoms.

The symptom complex is due to the peritoneal insult and manifests itself as soon as this structure is involved. The important ones are pain and tenderness and rigidity.

Pain in the belly, especially in the right iliac region coming on suddenly or sharply during the course of typhoid, either in the first or consequent weeks, and not relieved after an enema or spontaneously in a very short time is a most grave symptom and one which usually means something. Should this be accompanied by tenderness in the same region and should there be rigidity, gradually extending over the abdomen, the diagnosis, even in the absence of all other symptoms, should be one of probable perforation. Many errors have arisen on account of the textbook descriptions of the symptomatology, in which is pictured so graphically and strikingly the symptom of shock as a necessary accompaniment of perforation. As some one has said, "these descriptions and symptoms are the best ever written of impending death and are not at all those of the perforation."

Shock is not a symptom in many cases. Shock comes on often very late, too late to do good by any form of treatment.

Shock should not be awaited either before making a diagnosis nor as an indication for operation. On the other hand it is no bar nor is it always a contraindication to operation.

Of the other symptoms, pulse, temperature, vomiting, distention, tympany over the area of normal liver dulness and altered facial expression are all too inconstant and too variable to be depended upon. The three always present, the cardinal symptoms, the all sufficient indices, are pain, tenderness and rigidity, or, in the order of importance probably rigidity, pain, tenderness. The manifestation of any one of these during the course of the disease is cause to redouble or treble one's vigilance, making frequenter visits or remaining with the patient until satisfied as to the cause for its production, and at the same time we would get in touch with the surgeon, if necessary have him see the case in consultation, because we believe he is able to more readily recognise peritoneal damage than those not accustomed to deal with these structures, nor so familiar with their pathology.

Robert Morris recently expressed himself as believing that in every case of typhoid the physician should have a surgical consultant ready for just such emergencies. With such an arrangement the mortality should be greatly reduced and at least one-half of the cases now dying from this cause could and would be saved. It is largely on account of early recognition and prompt surgery, even in doubtful cases, that so many more are saved in hospital than in private practice, and this will, to a certain extent, always be true. Much can, however, be done in general practice if there is a thorough appreciation of the constant danger and the early symptoms and a proper understanding and relationship established between physician and surgeon.

A few words as to the surgical indications and technic: the best results are obtained in cases operated within the first twelve hours after rupture. Of cases operated upon within this period between 50 and 60 per cent. have recovered. The next most favorable period is within 24 hours; after 36 hours have elapsed most all cases will die, operation or no operation.

The incision should be made in the right linea semilunaris, as the vast majority of perforations occur within the last 12 inches of the ileum.

After the abdomen is opened search at once for the cecum and reach the distal 12 or 20 inches of the gut. When the perforation is found, waste no time trimming the ulcer or in fancy work, but close the opening, either by a purse string suture or by a continuous right angle suture, placed horizontally to the long axis of the gut. If only one opening is found it may be stitched to the parietal wound. Wash out the cavity rapidly and

thoroughly with physiological saline solution and close the abdomen, after providing ample and abundant drainage.

If general anesthesia is feared use cocaine locally, but waste no time in fancy frills or surgical refinements. These latter are dangerous, but even such are not as dangerous as delay in diagnosis.

In conclusion, we would add the following summary of a paper recently read by the writer before the Mississippi Valley Medical Association:

1. Perforations are to be expected in about 2.5 per cent. of all cases of typhoid fever.

2. Prompt surgical intervention is the best and only logical treatment.

3. Early diagnosis is most desirable and will be the means of greatly reducing the mortality, as 55 to 60 per cent. would recover.

4. Diagnosis, sufficiently early to achieve these results, can only be made by careful watching, treating all cases as serious and a proper interpretation of the symptoms. At the first indication have the surgeon in consultation and be prepared to operate.

5. More cases die from delay than errors in surgical technique, therefore in doubtful cases, though a mistake may be made and no perforation found, operate.

6. No case, unless dying, is so desperate as to be beyond some hope of saving, so in operating be rapid, lose no time in fancy work or in surgical refinement and be sure to drain.

7. "Get into the belly quickly and get out more quickly."

On the Automobile.¹

By SIMEON FORD, New York.

OUR streets have always been hard enough to navigate, heaven knows, but nowadays, with the electric trolleys and the automobiles added, pedestrianism has degenerated into a mere succession of frenzied leaps and convulsive stops, and our progress to and fro is like that of the startled fawn, which

"Bounds from crag to crag,
Hearing the hunter's horn."

Shakespeare, who was up to date and a little ahead of it, said:

"No man means evil but the devil, and we shall
know him by his horns."

1. From "A Few Remarks," by Simeon Ford. Copyright, 1903, by Doubleday, Page & Co.

This eternal horn-blowing is a nuisance and a nerve-destroying crime, and is unnecessary and silly. I have noticed that the smaller the auto the bigger the horn. To hear one of these little tin washboilers, with a one-horse-power engine and a twelve-horse-power horn and a twenty-mule-power driver, coming down the avenue, you'd suppose Gabriel with his trump had broken loose at last, and when you look up, expecting to see a trump, you see nothing but a two-spot.

I don't claim that every man who runs an auto is a jackass, but I do claim that every jackass runs an auto. I run one myself.

But when I run over a pedestrian, I just mow him down in a quiet, dignified and refined manner, and don't add insult to injury by frightening him to death before I kill him.

I am an automobilist, not from choice, but in self-defense. Some achieve automobiles and some have automobiles thrust upon them. I live in a suburban town which was early seized with automobilousness in its most virulent form. One of my immediate neighbors bought a machine of limited capacity for everything but noise. Its capacity for noise was unlimited. It was also long on smell. At first the rest of us talked of tar and feathers. Some of us thought that was too mild and that the punishment should fit the crime. And while we hesitated, we all got the craze, and now we are all tarred with the same stick.

This was my daily program for a time: I would start to drive to the station. Presently the earth would tremble, my horses would tremble, my coachman would tremble, and I would tremble most of all, and with rumblings and snortings and smells indescribable, my neighbor would dash by. I would then breathe a prayer, disentangle my horses from a barbed-wire fence, pluck my wagon from a nearby tree, reconnect them, and proceed on my way rejoicing. Presently I would overhaul my friend. He and his chauffeur would be reclining on their backs under the auto, doing stunts with spanners and monkey wrenches. I would then take my neighbor into my wagon, drive him to the station, and his machine would wait to be towed home by my team.

My neighbor argued that the auto was the coming mode of locomotion, and that the horse must go. I agreed with the latter proposition. I reminded him that one of my best horses, hearing his approach, decided that he must go, and that I thought he was going yet. I stayed with him awhile, but decided he was too swift a proposition for me to keep company with. I never could decide whether it is the appearance of the machine, or the smell, or the raiment of the driver that gets into a horse's nerves, but I reckon it's the raiment. The spiritual description

of the Lily of the Field applies to them pretty well: "They toil not, neither do they spin, but verily I say unto you that Solomon in all his glory was not arrayed like one of these."

The first machine I looked at was small, simple and inexpensive. It had but one cylinder. The salesman said that was an advantage. He said a four-cylinder engine would get out of order four times as often. This machine had a handle on the side like a barrel-organ. He showed me how to make it go fast, and slow, and stop, and start, and all while the machine stood in the store. A child of ten years could run it, he said. "Now, if you want to get out of a tight place," he said, "get a sudden move on—you touch this lever called the accelerator."

He touched it, and with that something went wrong, and the handle I have alluded to flew around and smote him violently in the abdomen. When he came to I told him a child of ten might run the machine, but the child would have to have a very strong stomach.

Next, a friend took me out in a base-burning steam vehicle. He had a third man with him, and I sat behind on a sort of broiler arranged over the boiler. The day was warm, and I understood at once why the machine was called a "steamer." I felt like the nigger who used to squat on the safety-valve on the Mississippi boats. I amused myself by watching the steam-gage and wondering how long it would take me to come down if anything went wrong. The exhaust steam went up my trouser's leg and I felt like the squid, which scientists say envelops itself in a cloud or fog of its own making in order to conceal itself from its enemies. My friend, meanwhile, explained the mechanism, but I told him if I had to become a master mechanic it would pay me better to go and run the *Kaiser Wilhelm*.

The consensus of opinion seemed to be that the gasoline machine was the thing. There was power, simple and direct! It ran by a series of explosions. That appealed to me at once. That's the way my hotel on Park avenue has been run during the past year—by a series of explosions of dynamite by the tunnel people, and a series of explosions of profanity on the part of myself and my few remaining boarders.

Every auto I thought of buying all my friends assured me was no good, and in the light of subsequent experiences I guess they were right. Finally, on my own responsibility, I bought that lovely lobster-pink creation in which I may be seen 'most any pleasant day now running merrily through the park or street and anon sitting reposefully while my chauffeur, assisted by the populace, explores the vitals of the machine, looking for trouble. I remember when I was a boy I saw and admired at Barnum's

Museum a working model of an engine all made of glass, but I never dreamed I should own one.

I am getting proud of my machine. I think it holds the record for having traveled fewer miles in a given time than any other yet devised. My engine will break when standing motionless on the barn floor, simply through the power of gravitation. It is operated by a skilled mechanic and costs me as much per month as it would to run the *Corsair*. But it has one merit. I never wander so far from my own fireside but that I can easily walk back. I have worn out six sets of hinges in the hood peering at the engine to see what is busted.

I used to get up and help the chauffeur to look, until one day when we were both hidden behind the hood a sneak carried off my fur robes. Now I just sit back and listen to the jeers of the populace and sigh to think of the happy times gone by when I used to travel on the street cars and get to my destination on the same day.

PROGRESS IN MEDICAL SCIENCE.

Therapeutics.

CARDIAC TONICS IN PNEUMONIA.

D. B. LEES, M.D., F.R.C.P., (*British Med. Jour.*, November 28, 1903), in the second Harveian Lecture, considers that it is generally advisable to begin the use of heart tonics about the third or fourth day of the disease and that they ought to be given, if at all, somewhat freely.

Of these drugs strychnine is probably the most useful and should be given hypodermatically.

Atropine by subcutaneous injection is also very serviceable in children, but not so useful for adults because they suffer much more than children from the dryness of throat and other unpleasant effects of belladonna. In children large doses of this drug will cause chiefly flushing of skin which is of no importance.

Oxygen by inhalation assists the aeration of blood in the lungs, and thus improves the quality of the blood supplied to the cardiac muscle. It is therefore truly a cardiac tonic. Its use should be begun as soon as cyanosis is definite, and should be continued for five minutes every hour, whether the patient is awake or asleep. It can be given without disturbing him in the least.

Oxygen is certainly a most valuable remedy, and ranks with strychnine in the treatment of pneumonia. But neither strychnine nor oxygen, nor both together, will often save life if the right auricle be not relieved. After a bleeding they are powerful remedies; without removal of blood they often fail, and almost necessarily. It is good to maintain the strength of the cardiac muscle; it is still better to diminish its labor. It is best to do both.

Digitalis will not always reduce the frequency of the pulse in pneumonia, especially when the temperature is high. It is most likely to be of service after relief of the right heart, when the fever is moderate and the pulse still remains weak and frequent.

Ammonium carbonate may be given when there is evidence of much secretion in the bronchial tubes.

Alcohol, though called a "stimulant," has not much title to be considered a cardiac tonic. It is essentially a vasomotor depressant, and as such may help the heart indirectly when the tension is high. There is also sometimes a temporary increase in the strength of the pulse after the administration of a moderate dose, probably due to increased blood supply to the cardiac muscle, through relaxation of coronary arterioles. It is therefore possible that repeated small doses may be of service in pneumonia, but the large doses sometimes advised are likely to do more harm than good. To imagine that brandy can "support" the heart when the right side is becoming paralysed from overdistension is absurd. In such a case the only satisfactory cardiac tonic is a venesection.—*Review of Reviews*.

TYPHOID FEVER.

EGBERT LEFEVRE, (*Medical News*, January 2, 1904), states that against the action of the typhoid toxin on the heart and nervous system, two agents have been especially advocated, viz.: strychnine and alcohol. At the present time strychnine is the more commonly used, and he strongly dissents from the present plan of giving strychnine in heroic doses as soon as typhoid fever is diagnosed. It is not unusual to find patients both in hospital and private practice, who have gone through the first week or ten days of typhoid fever so freely drugged with strychnine that their reflexes were exaggerated. In these cases much of the restlessness and distress, supposed to be due to the disease, is actually caused by medication. He believes that patients who are early stimulated to the full physiologic limit by strychnine make a slower convalescence, and that they are more prone to vasomotor disturbance and nervous depression during this stage. Strychnine

should be reserved until the condition of the reflexes, both cardiac and spinal, show that the disease has begun to affect the nervous centers. The dose should then be regulated to meet the indications. As regards alcohol, he believes that while in the animal and healthy individual it may show no action upon the circulatory system beyond a reflex one, in diseased conditions, especially the infectious diseases, it has a different action. We are all familiar with the fact that large doses can be given in febrile cases without symptoms of intoxication being induced, or the odor of alcohol appearing on the breath, and that under its use the nervous system is quieted and the heart beat slowed. Whether in health alcohol acts as a food is not germane to the discussion; certainly in typhoid fever alcohol acts both as a stimulant and a food, and when the diet is deficient, as when a milk diet alone is given, nutrition is improved and emaciation retarded.—*Cleveland Medical Journal*.

THE USE OF ARSENIC.

POPE (*International Medical Annual*), lays down the following rules: see that the tongue is clean. Put the patient on a bland, easily digested diet. Use the drug in a much diluted form and in the same dilution throughout. Starting with $2\frac{1}{2}$ minims of Fowler's solution to the ounce of water, thrice daily, give two ounces of the same strength next day; three ounces the day after, and so on as long as no unpleasant symptoms occur. Small doses may be given after meals, large doses during meals. In adults the initial dose may be two or three ounces of the mixture thrice daily. Do not discontinue at the first attack of vomiting. If vomiting persists discontinue drug for 24 hours, and then resume with the same dose. Examine daily for toxic symptoms.—*Denver Medical Times*.

NEURALGIA.

C. H. FRAZER, (*American Jour. of Med. Sciences*,) December, 1903,) states that trifacial neuralgia is probably in about 20 per cent. of the cases amenable to treatment other than operative. In some cases the disease has a tendency to run its course, usually reaching its height in five or six years, and then exhibiting a tendency to spontaneous cure. The medicinal treatment consists, first, in the removal of all predisposing causes, as malaria, anemia, exhaustion, or any peripheral irritation, such as a carious tooth, or antral disease. Secondly, the use of drugs, and the drug which is, *par excellence*, the most efficacious, especially so in the exhausted

and anemic state, is strychnine. In cases of but one or two years' standing, strychnine properly administered will arrest or control the disease almost invariably. In order to obtain this result the drug must be administered in heroic doses, and the patient must be kept under the closest observation, and should be confined to bed. The remedy is administered hypodermically once daily, in gradually ascending doses, until at the expiration of two weeks the physiologic limit is reached. Thus beginning with one-thirtieth of a grain daily the dose may be increased to one-tenth or one-eighth, or higher, and when the maximum dose is reached it should not be given oftener than once on alternate days. After the pain has entirely disappeared the drug should be gradually withdrawn. As adjuvants to this treatment rest is regarded as of the utmost importance, and iodide of potassium and the tincture of chlorid of iron are regarded as more or less helpful. It is perfectly proper and justifiable to give medicinal measures a fair trial for a year at the utmost, and then if the attacks are very frequent, severe and uncontrollable, operative intervention is the only hope of relief.—*Cleveland Med. Jour.*

HOWARD S. ANDERS, (*Medical News*, March 19, 1904,) states that arsenic is an improver of nutrition, seeming to be a direct stimulant to nutrition by diminishing or checking tissue waste. Indirectly it improves nutrition by increasing the recuperative powers, and some people need arsenic to create a normal neuromuscular vigor, just as the syphilitic needs the iodids, and the chlorotic, iron. He hesitates in regard to employing it in cases of tuberculosis, although he believes it to be of value in those cases in which fever is absent. He believes it almost a specific in Saint Vitus's dance, and thinks it best administered by beginning with about three drops of Fowler's solution and increasing about two or three drops each successive day. He considers the drug of great importance in the treatment of chronic malaria, anemias, cachexias, and in intermittent malarial neuralgia.—*Cleveland Med. Jour.*

FOR SCIATICA.

R	Calci glycerophosphatis.	
	Magnesii glycerophosphatis	15 grains.
	Potassii glycerophosphatis	4 drams.
	Sodii glycerophosphatis	1½ drams.
	Aqua destil.	6 drams.

M.—Ft. sol. Sig.—Inject one drachm (4 gm.) into seat of the pain once daily.—*Medical Review of Reviews.*

CHRONIC RHEUMATISM.

R	Sodium iodid.....*	2 drams.
	Wine of colchicum root.....	4 drams.
	Sodium salicylate	3 drams.
	Ammoniated tincture of guaiacum.....	2 ounces.
	Compound syrup of sarsaparilla, sufficient to make	6 fluid ounces.

Dessertspoonful three times daily.—*Merck's Archives.*

R	Thiocol	30 grains.
	Sodium benzoate.....	30 grains.
	Tincture of aconite.....	20 drops.
	Syrup of poppy.....	10 drams.
	Cherry-laurel water	2½ drams.
	Syrup of senega, sufficient to make.....	5 ounces.

Tablespoonful three times daily.—*La Presse Med.*

ABSTRACTS.

Treatment of Serous Effusions.

JAMES BARR, in a clinical lecture delivered at the Liverpool Royal Infirmary, (*British Medical Journal*, March 19, 1904,) describes what is evidently a new method of treating serous effusions. The idea occurred to him to inject 1 fluidrachm of adrenalin chloride solution into the pleural sac, in a case of abdominal cancer extending to the pleura, after the aspiration of a large quantity of bloody serum, the object of the injection being to lessen the secretion. There was no further secretion, consequently no further tapping and the patient spent the remainder of her life in perfect comfort so far as her chest was concerned. This treatment was extended to cases of ascites due to hepatic cirrhosis in which marked results were not expected. However, the rapidity of secretion was diminished and no ill effects were noted, the quantity of adrenalin solution used varying from 2 to 3 fluidrachms.

In a case of pericarditis with effusion, in a lad, 19 fluidounces of serum were withdrawn from the pericardium, but a reaccumulation rapidly followed. The patient's condition becoming critical the paracentesis was repeated, 20 ounces of fluid being withdrawn with immediate improvement in the quality of the pulse. Forty minims of solution adrenalin chloride, 1-1000, were injected into the pericardium. The pulse at the wrist disappeared, the boy became of an ashy leaden hue and had an anxious expression. Immediately nitroglycerine and atropine were administered and the boy quickly rallied. No further tapping was required. The

same patient had a subsequent attack of left pleurisy with effusion. Ten fluidounces of serum was withdrawn from the chest and 1 fluidrachm of adrenalin chloride solution was injected. There was no reaccumulation.

In a case of tuberculous peritonitis and ascites 200 fluidounces of serum was drawn and 2 fluidrachms of solution adrenalin chloride introduced into the peritoneal cavity, with 4 pints of aseptic air (to prevent adhesions). Thirteen days later 237 fluidounces of serum were withdrawn and 2 fluidrachms of adrenalin chloride solution and 2 pints of air were injected. Upon a third occasion, eleven days later, 196 fluidounces of serum was obtained by tapping, and 3 fluidrachms of adrenalin chloride solution and 4 pints of sterile air were injected. No reaccumulation of fluid occurred.

A female child of seven years was the next patient. One pint of fluid was withdrawn from her pleural cavity and 1 fluidrachm of adrenalin chloride solution and $\frac{1}{2}$ pint of sterile air were injected. Though it was highly probable that the pleurisy was tuberculous there was no reaccumulation of fluid and the patient recovered.

Treatment of Carcinoma Uteri Cases Not Justifiably Treated by Radical Operation.

THE first duty in a hopeless case of this disease is to relieve suffering. Opiates, according to Tuttle (*Boston Medical and Surgical Journal*, April 17, 1902,) should be used judiciously to combat the pain and the irritation. Small doses should be given; to obtain the longest continued effect from a given dose, it should be administered by the rectum.

Cauliflower growths and painful granulations may be kept down by surgical means and local treatment. In a similar manner the secretions may be purified, autoinfections prevented, and the irritation of neighboring parts that have been soiled by the acrid discharges may be allayed. The local treatment is to maintain as far as possible a clean granulating condition of the ulcerated surface.

Hemorrhages are practically treated with the curette and cautery. It may be necessary, rarely, to resort to packing or to chemical hemostatics.

For the complicated and distressing bladder conditions that sometimes arise, about all that can be done is to keep the patient half-way dry, grease the skin and parts exposed to irritation with a soothing ointment, and to administer opiates sufficient to con-

trol or to modify the pain. The bowels, in rectal complications, should be kept open with saline cathartics.

As the disease extends into the vaginal region, the marked infiltration may be treated with cleansing solutions, hot fomentations, and bland unguents.

Hypodermic injections of antiseptic fluids, as a method of treatment, is looked on with favor by Tuttle, who is inclined to a theory that cancer is the result of a change in the environments of a cell or group of cells, by which their normal nutrition is affected, and which results in their active proliferation, contrary to the natural law of growth. If this theory be accepted, he looks upon the individual cells making up the neoplasm as foreign bodies, and holds them singly in the same relation to the body as foreign elements introduced from without, such as bacterial or ameboid forms of life, and he suggests a hypodermic treatment with various chemicals, such as oils, alcohols, and other agencies.—*Therapeutic Gazette*.

The Cervix in Ectopic Gestation.

PINARD, in giving his opinion on this subject, says he finds the modification of the cervix uteri in extrauterine pregnancy is not properly interpreted. In reports we read "Cervix small, firm, not softened." These words mislead many students and gynecologists. The cervix always becomes softened in pregnancy, whether normal or extrauterine, but it must not be forgotten that the softening process passes away when the ovum dies. Very often when ectopic gestation is diagnosticated that condition exists, clinically speaking, but the fetus has for some time been dead. The cervix in such a case is firm, for, obstetrically speaking, there is no pregnancy, nothing but a fetal sac. Pinard notes that when an extrauterine pregnancy has gone on to term, the cervix uteri may be so soft that an experienced obstetrician may suspect that the gestation must be normal after all.—*British Medical Journal*.

Treatment of Indolent Ulcers.

STEWART, H. KNOX, Philadelphia, Pa., says: A lady about 40 years of age, suffered from a condition in which both legs, from knees to ankles, were encrusted with a thick scale or scab, which on the surface resembled both in color and appearance the ashy gray hue of the surface of a hornet's nest. I had little hope of relieving her; however, I thought that as glyco-thymoline had given me successful results in previous cases of leg ulcers and

obstinate skin conditions, I would try it and accordingly began by spraying the affected parts thoroughly with equal parts of glyco-thymoline and water. These applications were made daily and the legs wrapped also in gauze saturated with 50 per cent. solution of the remedy. The crust began to soften with this line of treatment and was removed little by little. Finally, the entire surface became clean. The appearance then was as if raw flesh had been coated with collodion. The legs were loosely bandaged with gauze kept saturated with 50 per cent. solution of glyco-thymoline. Improvement now became rapid and ultimately a complete cure was obtained, the skin becoming healthy and smooth. The duration of treatment was about nine months. There is no doubt in my mind that glyco-thymoline is distinctly alterative, that it increases cell activity, and is especially useful in indolent conditions, like those described.

Local Anesthesia.

HORATIO C. WOOD, of Philadelphia, (*Therapeutic Review*, Feb., 1904,) says the suggestion of Barker, that eucain be substituted for cocain, seems to have brought infiltration anesthesia almost to the high water mark and has been followed out in Philadelphia by various surgeons with great satisfaction. The plan is readily carried out as follows: powders are kept in stock in the operating room containing 0.02 gm. (3 grains) of beta-eucain and 0.8 gm. (12 grains) of pure sodium chloride. At the time of the operation one such powder is dissolved in 100 cc. of boiling distilled water, and when it is cooled sufficiently 1 cc. of adrenalin chloride solution (1-1,000) is added; 100 cc. of the resulting liquid contains 3 grains of B-eucain and 0.015 grains of adrenalin chloride. The whole 100 cc. may be used at one infiltration anesthesia, but according to Barker from 50 to 60 cc. usually suffices, even in such considerable operations as for the cure of hernia, castration and the like. It is of course essential that the syringe used be aseptic and the surgeon should always employ the platinum needle with an iridium point which can, without injury, be disinfected in the flame of an alcohol lamp immediately before use.

Unlawful Practice of Medicine.

At a meeting of the New York Society of Medical Jurisprudence, held October 12, 1903, Justice Julius M. Mayer read a paper on "Criminal Procedure against the Unlawful practice of Medicine."

He reviewed the subject from the standpoint of a justice of the Court of Special Sessions, where cases of alleged unlawful practice are tried, and among his conclusions were: That a statute should be enacted defining more clearly what is the "practice of medicine," that there should be no minimum punishment provided in the law, and that some method should be devised to prevent the newspapers from publishing the advertisements of palmists and clairvoyants, whose real occupation is the practice of medicine illegally. In speaking on the latter point he said: "The worst agency in New York today that helps the man who sells either real or pretended abortion medicine is the newspapers, for they make it possible to ensnare the unwary, the superstitious and the fearful. I suggest that in the new school of journalism at Columbia University there be a chair of advertising, and let it be taught to the young men of the newspaper profession that the first duty of a great newspaper is to censor its medical advertising. Many persons who advertise as palmists and clairvoyants advertise simply to cover the giving of medicines of the kind I have mentioned."—*Medical Review of Reviews*.

Urotropin vs. Helmitol.

ERICH BRUCH, in a brochure entitled, *Experimental Investigations of Urotropin and Urotropin Anhydromethylenecitrate* (Breslau, 1903), details some comparative tests of these two drugs which he made at Prof. Stern's Royal University Clinic, Breslau. He concludes from his exhaustive investigations that the latter, which has been introduced under the names of new-urotropin and helmitol, is inferior to urotropin. As it contains only 40.7 per cent. of urotropin, it takes 1.5 gram ($22\frac{1}{2}$ grains) thereof to equal the action of 0.6 gram (9 grains) of urotropin. Hence in order to obtain equal results, the dose of new-urotropin or helmitol must be based on its urotropin contents, that is must be two and a half times as great. This correspondingly larger dose is not more effective than urotropin, either in normal urine or in urine containing albumin or pus.

Celiotomy.

IN VARIOUS communications to medical journals during the last few years, we have noticed this term used to describe the procedure now generally spoken of as abdominal section. The old-fashioned term "laparotomy" is sanctified by usage, and is generally understood, though it labors under the etymological dis-

advantage of signifying "loin-cutting," and cannot therefore be defended, philologically, as a designation for incision through the anterior abdominal parietes. If, however, we are to change it, let us at least adopt a term that is beyond cavil; for us celiotomy seems open to grave objection. We believe the originator of the word was Mr. Bland-Sutton, who is quite a good enough biologist to know the peritoneal cavity is not the only representative of the celom in the body, and to use a term that is based upon the assumption that it is, is to court misunderstanding by unnecessary ambiguity. Any operation in which the pleura or pericardium was incised could be equally accurately described as a celiotomy, for both these cavities represent in the adult the space formed by the mesoblastic splitting in the embryo. We protest, therefore, against the adoption of a term which violates convention without ensuring accuracy. We are no opponents of reform in nosology, and we should gladly welcome a good substitute for laparotomy, but we would rather "bear those ills we have than fly to others," equally grievous, and less generally understood.—*Med. Press and Circular*.

Typhoid Fever and Unguentum Crede.

LEONARD WEBER, New York Post-Graduate Medical School and Hospital, Consulting Physician to Saint Mark's Hospital, New York, in a lecture on typhoid fever, delivered at the New York Post-Graduate Medical School, November 2, 1903, said: I have also the records of three cases of grave typhoid sepsis saved by inunctions of unguentum Credé—soluble metallic silver ointment rubbed in thoroughly over various parts of the body, in doses of $\frac{1}{2}$ dram. Though the usual stimulants and excitants were also made use of in these cases, I believe, nevertheless, that they were really saved by the antiseptic action of the Credé preparation.

Movable Kidney.

RUFUS B. HALL, Cincinnati, (*Am. Jour. of Obstetrics*, Jan., 1904,) says the present practice, in this condition, is not to interfere until compelled to do so by torsion of the pedicle, or some serious pathological condition. While it may be conceded that only a small percentage of patients suffering from movable kidney have obstruction in the ureter, necessitating an operation for relief, Hall believes that quite a large proportion develop hydro- or pyonephrosis, and in a few, complete obstruction. Many of these cases suffer more or less discomfort in the region of the dis-

placed kidney and annoyance. The pain is often constant so long as the patient is in the upright position. Fixation gives these patients relief. The author is of the opinion that these cases should be operated upon before hydronephrosis may develop, as the gradually increasing curvature of the ureter with its obstruction has a marked effect upon the excretory function of the kidney and may eventually produce atrophy and cystic degeneration. The urine being unable to escape, it distends the pelvis and calices, causing destruction in the tubules, and the Malpighian tufts, and terminates in a cyst, the walls of which are composed of the pelvis and the capsule of the kidney. During the acute attacks, the examination of urine will reveal more or less pus present; but this will almost entirely disappear three or four days after the attack has subsided. This examination of the urine between attacks may cause a faulty diagnosis. The operation of relief of this condition, is almost devoid of danger; and, if it is performed before serious pathological changes have taken place in the organ, relief is immediate and permanent.—*Medical News*.

TOPICS OF PUBLIC INTEREST.

Afterthoughts: A Correspondence.

By A. JACOBI, M. D.,

Chairman of the Joint Conference Committee.

(*Brooklyn Medical Journal*, May, 1904.)

“A LONG step in advance has just been taken by the agreement of the New York State Medical Association and the Medical Society of the State of New York to join hands and to form an organisation worthy of the twelve thousand physicians of the Empire State.”—Frederick Holme Wiggin, president’s address, *N. Y. State Journal of Medicine*, November, 1903.

“I feel that we should consider not only what is for our present interests, not our feelings for the present time, but should take into consideration the question of the future welfare of the medical profession of the State of New York.”—William H. Thornton, presidential address, March 21, 1904.

EDITOR OF THE BROOKLYN JOURNAL:

Dear Sir—You have been good enough to address me lately in reference to the unification of the medical profession of the

State of New York. My first impression when I read your letter was that I had nothing to say in addition to the reports made by the committees of the Medical Society of the State of New York and of the New York State Medical Association. They have been published and appreciated, both for their historical value and the lessons they teach. Still there are several reasons why I should apply to you for a hearing in regard to the evolution which has taken place under our eyes and with the cordial support of most of us. Like those many who take a warm interest in the welfare and the progress of the profession—their number is increasing with the knowledge of its beneficial influence in shaping the sanitary, political and social destiny of the people—I have rejoiced in the success of the endeavors to consolidate our two large medical bodies so as to continue and reestablish on its old firm foundation the Medical Society of the State of New York, and to fortify it by the democratic principles elaborated in the organisation of the American and the New York State Medical Associations. Some of our large journals,—the *Medical News*, the *New York and Philadelphia Medical Journal*, the *Journal of the American Medical Association*, *American Medicine* and others,—have made their readers fully acquainted from time to time with the labors of the two committees appointed by the Medical Society of the State and the New York State Association. They were not always light. It took time, patience and persistency to arrive at results which were to meet with unanimous acceptance.

What is this unanimity due to? To no single person or number of persons. History is not made by individuals, but is the visible result of a gradual evolution, the appreciation of which may be obscured or retarded by the personal predominance of an individual, but the latter is rather the creation of his time and surroundings, than the “time” the creature of an individual. The history of the medical profession and its progress are not the work of personal influences, but of the advancing opinion and demands of that very profession at large. In the State of New York we have experienced many such instances. The improvement in medical teaching and mainly the lengthening of college courses from two to three, and from three to four years are due to the pressure public medical opinion exerted on the schools. They were influenced by the demands of the practitioners as represented in the large societies. We never knew of an instance in which the profession gave up its fight for improvement; but those who have lived long enough remember quite well that once a medical faculty appeared before its class of students to announce that the term of study after having been lengthened would again

be shortened, and the curriculum crippled. Then we remember the constant endeavor to establish state examinations, which must be passed previous to the granting of the license to practise medicine, also the increase of the requirements for matriculation. We also remember not only that some of the medical schools lent no friendly hand, but that the profession at large, represented in the Medical Society in the State of New York, had to fight the battle of medical progress against the schools. Many may even know that representatives of a few colleges labored hard to repeal a law which appeared to them to restrict their privileges and to curtail their advantages.

It is proper that medical men should recognise the fact that their welfare rested and rests on their own exertions, and not on any established and controlling power outside. It is the democratic spirit that rules the social and political existence of our people which has been governing the action of the medical masses. No American used to self-government and self-help waits either for outside pressure to enable him to overcome difficulties or to attain his legitimate ends, both in politics and in the interest of scientific or professional affairs. It is this democratic principle underlying the activity of our people that has been powerful in the development of the medical profession.

That explains what happened twenty-two years ago, and again this year. Both separation and consolidation were the doings of the medical men of the state. There were spokesmen, but no self-styled leader to initiate the several movements that have shaken the profession to its very foundation. Both parties were fired by what was to them a sacred principle. After nearly a generation we find ourselves on the same platform. The American Medical Association has given official recognition to the fact that cultured men must not be whipped into line by ironclad laws, but are expected to obey the rules of gentlemanly behavior on principle, and that ethics are not the outgrowth of fear but of heart and intellect. What is it to us that there are irreconcilables? A few morbid natures will tell you that you have been "snared" and "betrayed" when you feel like taking the hand of your brother from whom you are no longer estranged by principle or other interests. A few others are wise enough in their generation to bend before the storm of universal enthusiasm, and claim the credit of unification which they have opposed obstinately and bitterly.

After all, it was the medical profession which was unanimous as to the necessity of burying the hatchet which threatened to become a boomerang. Mainly to the young men is due the credit of insisting upon belonging to a united profession, not very vocifer-

erously but unmistakably. To them belongs the future, to them also the future leadership in the counsels of the profession of the state. Older men who have been through it all have reason to be satisfied with the share they took on either side, both in the battle for what they considered principle and in the reconciliation of the no longer divided parties, and are quite willing to let those work ahead who have both the strength and good will. I know I was correct when a few months ago I said to you all: "After unification we shall be satisfied that nothing will ever sever us again. For there will never be a diversity of principles like twenty-two years ago. There will be a common faith, aim, and altar. We shall take in the medical brotherhood the place which belongs to us, and work for the ideals—scientific, moral and practical—such as no other profession can realise, together with our peers all over the Union. We must or need split up into parties nevermore. It is only to the undivided and indivisible body medical that the American people will look for authoritative guidance in matters of sanitation, education and forensic legislation. What a Greek sage demanded should and may become true, viz.: "that the commonwealth will be advised and governed by the physician."

Quod felix faustumque sit. Very little is required, now that the Medical Society of the State of New York and the New York State Medical Association have unanimously adopted the reports and resolutions of the Joint Conference Committee, and the ratifications of the county societies and county associations arrive in rapid succession. An application to the Supreme Court, as the committee has promised, will be made early in May. It is a pleasure to acknowledge the services rendered by a Brooklynite for the purpose of facilitating that final step. Dr. James H. McCabe, one of your members of the Senate, volunteered to take charge and steer safely the following brief bills, which were considered desirable by many of us. They are as follows:

An Act to amend chapter three hundred and seventy-nine of the laws of eighteen hundred and eighty-five, entitled, "An Act regarding membership in the Medical Society of the State of New York."

The People of the State of New York represented in Senate and Assembly do enact as follows:

Section 1. Section one of chapter three hundred and seventy-nine of the laws of eighteen hundred and eighty-five, entitled "An act regarding membership in the Medical Society of the State of New York," is hereby amended so as to read as follows:

Section 1. The Medical Society of the State of New York shall have full power to elect such members as may be provided for by the constitution and by-laws of said Medical Society, said Medical Society being hereby empowered to fix and determine the qualifications and conditions of membership therein and to regulate and control its own membership.

Sec. 2. Section two of said act is hereby amended so as to read as follows:

Sec. 2. All acts and parts of acts, whether general or special, inconsistent with this act, are hereby repealed.

Sec. 3. This act shall take effect immediately.

An Act to amend chapter ninety-four of the laws of eighteen hundred and thirteen, entitled "An act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this state."

The People of the State of New York represented in Senate and Assembly do enact as follows:

Section 1. Section fourteen of chapter ninety-four of the laws of eighteen hundred and thirteen, entitled "An act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this state," is hereby amended so as to read as follows:

14. It shall be lawful for the Medical Society of the State of New York and the respective county medical societies to adopt constitutions and by-laws relative to the admission and expulsion of members and the regulation of their affairs; provided, that the constitutions and by-laws of county medical societies shall not be contrary to or inconsistent with the constitution and by-laws of the Medical Society of the State of New York, *except that each county medical society shall have full and unrestricted power of disposition and control over its real and personal property.*

Sec. 2. Section five and section seven of chapter ninety-four of the laws of eighteen hundred and thirteen, passed April tenth, eighteen hundred and thirteen, are hereby repealed.

Sec. 3. This act shall take effect immediately.

Both bills have passed the legislature, and are in the hands of the Governor for his signature. There seems to be no reasonable doubt but that they will be signed before the expiration of the time limit. They will complete the legislative measures which were required, or considered advisable, in the interest of the medical profession of the State of New York.

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A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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JUNE, 1904.

NO. II.

University of Buffalo Commencement.

THE fifty-eighth annual commencement of the medical department was held May 3, 1904, at the Teck Theater, at 11 o'clock a. m. At the same time and place and conjointly therewith the departments of pharmacy and dentistry held their graduating exercises.

ALUMNI ASSOCIATION.

In the morning at 9.30 o'clock the alumni gathered at the University building, where several class reunions were held and the usual greetings interchanged. Many old friends met and polished the links of a somewhat rusty chain of earlier acquaintanceship, and many new friendships were formed. The several committees were busy with their duties, and the registration was large. At 11 o'clock adjournment was had and the members of the association proceeded in a body to the Teck Theater to attend the commencement exercise. Elsewhere we publish the proceedings of both morning and afternoon sessions in detail as reported by the secretary.

MEETING OF THE COUNCIL.

Early in the day the annual meeting of the council of the university was held. The vice-chancellor, Hon. George Gorham, presided and the recommendation of the several faculties relating to the candidates for the degrees in medicine, pharmacy, and dentistry was confirmed. Five vacancies had occurred in its own ranks since the last annual meeting, caused by resignation and death—namely, General John C. Graves, resigned, and James O. Putnam, George S. Hazzard, Worthington C. Miner, and William S. Bissell (chancellor), deceased. Stephen M. Clement,

L. L. Babcock, John B. Olmstead, J. L. O'Brian and R. R. Heford were chosen to fill these vacancies.

The council also elected the following-named physicians to fill vacancies on the board of curators in the medical department: H. J. Nichols, Warren, Pa.; H. J. Knickerbocker, Geneva; Joseph Fowler, Benjamin G. Long and Franklin W. Barrows, Buffalo.

EXERCISES AT THE TECK.

A large audience assembled promptly at the appointed hour to greet the graduates and witness the ceremonies attendant upon the conferring of degrees. The several classes, numbering about 160, occupied seats immediately behind the orchestra, and the swells of music continued during the seating process. The faculties, lead by the Honorable George Gorham, vice-chancellor, then appeared upon the stage and took their appointed places.

DEPARTMENT OF MEDICINE.

The ceremonies began with prayer by the Rev. George B. Richards, rector of the Church of the Ascension, and after a musical selection the class in medicine, fifty-five in number, was presented to the chancellor by Professor John Parmenter, M.D., secretary of the faculty; then the dean, Professor M. D. Mann, M.D., administered the Hippocratic oath, after which the degree of doctor in medicine was conferred by the vice-chancellor, the Hon. Mr. Gorham, upon each of the following-named successful candidates:

Jabez Eldredge Armstrong, A.B.; Parker G. Borden, Fred Spencer Brickell, John Henry Burke, Melvil S. Coxe, Valentine Alphonsis Decot, Edward James Dourney, Harry Henry Ebberts, Harry Richard Silas Emes, John Fitz Gerald Fairbairn, Harry Nicholas Feltes, Thomas Francis Foley, Chauncey Wayne Grove, William Bentley Hamilton, B.B.E. and M.E.; Haley Waldo Hammond, Claude Smith Johnson, Lesser Kauffman, Ph.B.; Earl Dean Kilmer, Edward Charles Koenig, Arthur Garfield Lane, John C. S. Lappeus, Robert James Lawler, George Emerson Learn, Harry Roy Lohnes, Horace LoGrasso, William S. Lynch, Minor McDaniels, Myrtle Lothrop Massey, A.B.; William Michael Mehl, Robert C. Mehnert, Samuel Aloysius Moore, John Gray Morris, Jesse Clark Mosshammer, Stephen Vincent Mountain, John D'Arcy O'Brien, Caroline M. Osborn, John Corliss Plain, John Alphonse Ragone, Leonard Reu, Edna Augusta Rhodes, Victor Moreau Rice, Charles Richards, Floyd Richardson, Julius Richter, Herman William Schlappi, Charles Willard Selover, Robert Francis Sheehan, Jr., Douglass Henry Smith, Herbert Northrup Squier, Robert Shaw Taylor, Jr., Raymond Alexander Turnbull, John Lewis Van DeMark, George Garfield Wagner, Glenn Levi Whiting.

The honor roll was then announced by Dr. Mann, which included the following names, the standing of each being given; Chauncey Wayne Grove, Erie Pa., 92.51; Charles Richards, Buf-

falo, 92.54; Harry Roy Lohnes, Warren, Pa., 90.96; Earl Dean Kilmer, Rushford, 90.03.

DEPARTMENT OF PHARMACY.

The candidates for the degree of bachelor in pharmacy, thirty-eight in number, were then presented by Dr. John R. Gray, secretary of the college of pharmacy, and the chancellor conferred diplomas upon the following-named candidates:

William G. Beck, Henry A. Bell, Alfred J. Benson, Earl J. Brink, Cora May Brown, Walter L. Carlson, Ernest B. Cooper, Glen M. Coston, Homer E. Dyke, Charles J. Englehardt, Carl E. Freeman, Anna F. Frey, Oscar E. Heegaard, Walter K. Horton, George D. Hull, Sidney C. James, Lillian V. Jefferson, Louis A. Kaiser, Floyd M. Kline, Roland T. Lakey, Edith M. Lemon, Julian I. Le Roy, Edward S. Loge, Frank M. MacMurray, William H. McCoach, Otto S. McKee, Robert C. Mott, Anna C. W. Richter, Louis C. Sciarrino, J. Lee Sherlock, Glessner A. Smiley, John P. Smith, Albert D. Steadwell, Frank I. Strozzi, Clinton C. Turner, Willard E. Vincent, Clarence F. Walters, Eva H. Webster.

Dr. Willis G. Gregory, dean, then announced the honors and prizes in pharmacy as follows:

Senior honor roll—Mrs. Anna C. W. Richter, Buffalo, 96.90; Julian I. Le Roy, Poughkeepsie, 93.50; Homer E. Dyke, Port Angeles, Wash., 92.40; Miss Anna F. Frey, Warren, Pa., 90.10; Otto S. McKee, Lockport, 88.90.

Junior honor roll—Edgar H. Lincoln, Angelica; Arthur G. Drake, Cambridge Springs, Pa.; Wilber R. Davis, Norwich; W. A. Robinson, Buffalo; Rudolph W. Janke, Tonawanda.

Mrs. Anna C. W. Richter was awarded the Peabody prize of \$50, and Edgar H. Lincoln that of the faculty junior prize of \$25.

DEPARTMENT OF DENTISTRY.

The candidates for the degree of doctor in dental surgery, sixty-four in number, then were presented to the chancellor by Dr. George B. Snow, acting dean, and the following-named were given diplomas:

Clarence Robert Averill, Wesley Mason Backus, Lynn Berkeley Badgero, Ernest Rock Bailey, James Edward Barlow, Albert Wilson Beatty, Theron Coit Bliss, Glenn Kingston Brooks, Andrew Timothy Cahill, John Francis Clifford, Henry Graley Cody, Edgar Charles Cooke, Ward Hallock Cowles, Claude Francis Demerath, David Alanson Diltz, George Thomas Ellis, Carl Ferdinand Eschelman, Charles Augustus Espie, Alphaeus Vernon Fluhrer, John Frederick Folley, Elton Albert Foote, Leroy Herman Foote, Arthur James Foster, Walter Lowell Foster, Howard Thomas Gallagher, Donald Irving Gleason, Ernest Godfrey Graf, Warren Cogswell Greenfield, Mark A. Gregg, Fred J. Hall, Floyd Clinton Hart, Frank Morgan Howe, Daniel Edward Hurley, Howard Blish King, Francis Joseph Kelly, David Allen Lawton, Lloyd Elmer Leland, Frank Murel Leslie, James John Maloney, John Oppie McCall, A.B.; Daniel Francis McGillicuddy, Charles Michael McNeely, John Coats-

worth Mesmer, Walter Lull Moore, Frank James Moyer, Jr., Garnet Howard Morden, Grover Cleveland Hayward Murdock, Alice Loretto Murphy, Robert Edmond Lee Northrup, Nathan Lee Otis, Earl Surrey Packwood, James Hadley Rasey, Herbert Elgene Read, Arthur Lawrence Reynolds, Clayton Alexander Sayers, Walter Evans Steacy, Frank House Tatlock, Clarence Albert Thorn, Peter Benjamin Van Wie, John Bernard West, Fred Bushnell Wilson, George Anson Wilson, John Ellsworth White, John Augustine Collins.

Honors were awarded as follows:

Magna cum laude—John Oppie McCall, Binghamton, 95.55.

Cum laude—Leroy H. Foote, Whitehall, 94.90; Lynn B. Badgero, Dayton, 94.81; Garnet H. Morden, Wellington, Ont., 94.55; Clayton Alexander Sayers, Watertown, 94.45; Grover C. H. Murdock, Simcoe, Ont., 94.27; Howard T. Gallagher, Schenectady, 93.90; John B. West, Keeneyville, Pa., 93.90; Floyd Clinton Hart, Sinclairville, 93.62; Donald I. Gleason, 93.18.

During the musical selection which followed, a feature of great interest to the audience and graduates consisted in the distribution of flowers. The ushers were kept busy for at least fifteen minutes in the performance of this duty, and many of the recipients of this delicate and beautiful attention were literally overlaid with floral gifts. Cut flowers, garlands, and set pieces in profusion almost buried the graduates as they held their trophies during the remainder of the ceremonies.

The address to the graduated classes, delivered by Frank Hyatt Smith, M. A., of Buffalo, published elsewhere, was a masterful mingling of wisdom, wit and logic, interspersed with classic phrases and apt metaphors, which served to hold an impatient audience in fixed attention for more than half an hour. A benediction, followed by music, brought to a close these interesting and impressive commencement ceremonies of old Buffalo University.

Calox, the New Dentifrice.

MORE knowledge relating to the care of the teeth and less indifference regarding its importance would make the human race healthier and longevity would be increased. The occupation of the dentist would then be limited to a somewhat narrower field than he occupies at present, but it would be none the less dignified. To overcome tooth decay, the dentist must be something more than a mere cleaner of teeth, though the importance of this latter function should not be decried. To clean the teeth properly is an art that is not acquired by every dentist.

Since the discovery of the real causes of tooth decay only ignorant or dishonest dentists impeach the integrity or skill of the medical profession, by telling their patrons that strong and irritant medicines have caused the difficulty. Every educated dentist knows that tooth decay is due to the local action of lactic acid, produced through the agency of specific kinds of bacteria, which find a suitable field of growth in the human mouth. It is also generally conceded by authorities in dental pathology, that erosions of the teeth causing extensive loss of structure are due also to acid action, either by acid fermentation in the mouth or by acidity of the secretions of the mucous glands of the mouth.

When, therefore, a dentist is heard charging the administration of "strong medicines" with causing the early decay of teeth, he should be placed on the list of ignoramuses, or in the category of knaves. He betrays either ignorance or wilful depravity.

It was not our purpose, however, to discuss this phase of the subject when we began this writing, but we have been led into it by mere correlation of thought. To return, then, to our original purpose, we invite attention to the fact that a new dentifrice has been presented to the public through both medical and dental professions, which promises to accomplish what others have failed to do—namely, sterilise the mouth, arrest decay, and at the same time prove both agreeable and harmless. The name of this new dentifrice is *calox*,—a calcium dioxide added in appropriate proportions to English precipitated chalk as a basis, and which is then rendered very slightly saponacious and delicately flavored. It is to calcium dioxide that this new dentifrice owes its cleansing and germicidal properties. Of the value of the latter chemists say that calcium dioxide, like hydrogen dioxide, has the property of giving up oxygen in the nascent state when brought into contact with water or dead organic matter, at the same time forming milk of lime; it is, therefore, a powerful oxidising agent, germicide and antacid. It is quickly and completely decomposed by all acids, thus forming a salt of calcium and setting free hydrogen dioxide.

Mr. E. H. Gane, a chemist of experience, read a paper recently before the New York Odontological Society, in which he discussed the dental applications of some of the new oxygen compounds. An abstract of this paper is presented elsewhere, and will prove of interest to every person who desires to preserve sound and wholesome teeth.

The sum of the whole matter would seem definitely to indicate that when this new dentifrice, *calox*, is brought into contact with the fluids of the mouth, oxygen is at once liberated, which, while without effect on the soft tissues of the mouth, is an effective

destroyer of decomposing organic matter and bacterial life. In contact with the local acid areas found in decay of the teeth, erosion, or acid accumulations of fermenting food particles between or upon the teeth, these local acids decompose the calcium dioxide of the dentifrice, which neutralises their acidity by entering into combination with the calcium of the dioxide and setting free hydrogen dioxide, to exercise its well-known germicidal and detergent effects upon the bacteria and dead organic matter present. Because of this chemical reaction of calcium dioxide with acids, calox possesses a selective property for those situations on and about the teeth where local acid areas exist, and its oxidising, neutralising and germicidal powers are therefore exerted to the greatest extent where there is most necessity for such action.

This interesting subject might be pursued to a greater length, but we have said enough to point out its importance and to indicate a remedy,—a joint product of chemical and dental science,—for one of the greatest evils of our modern civilisation.

The Fifty-fifth Annual Meeting—A. M. A.

ATLANTIC CITY possesses the advantage of being near Buffalo, thanks to the enterprise of the Lehigh Valley Railroad, hence a large number of physicians from this region is contemplating a visit to the greatest American seaside resort during the meeting of the American Medical Association to be held June 7-10, 1904. It is unnecessary to enlarge upon the attractions of Atlantic City which, at this season of the year is at its best, as its habitués well understand. It is a cosmopolitan resort, peopled summer and winter, by visitors from every quarter, and is not sustained by any coterie, or locality. Its sustenance is obtained from the wide, wide world.

Fortunate, indeed, is Buffalo in its location; it is only a night's ride from New York, Chicago, Philadelphia, Washington, Baltimore, Cincinnati, and Atlantic City. The latter is brought within easy reach of the Bison City by reason of Buffalo's excellent railway facilities in general; but particularly because the splendid Lehigh Valley company has made it so comfortable for the traveler to journey by that route; and, further, because its railroad traverses the most picturesque region east of the Alleghany Mountains. A daytime ride through Central New York and its beautiful inland lake region; past the anthracite coal fields of Pennsylvania and over the mountain at Wilkesbarre; down the Mauch Chunk valley, skirting the Lehigh river to Bethlehem, where immense iron factories send skywards their tall chimneys,

and then out into an agricultural landscape that is not excelled, furnishes a variety of scene that is at once an education and an entertainment.

The busy doctor needs just such a break in his strenuous routine as this trip affords, and it can be had with such a comparatively small outlay that he should think twice before rejecting such an opportunity. He will meet hundreds of his friends from every section of the country, and altogether spend a more delightful week than can be done at any other time during the season. By consulting the officials of the Lehigh Valley Railway at 369 Main street, Buffalo, full particulars may be obtained and special reservations will be made. Telephone, Seneca 2670.

The members, delegates and visitors to the Atlantic City meeting from Chicago will journey by the Grand Trunk and Lehigh Valley railways, according to an itinerary arranged by Dr. Liston H. Montgomery, of that city. The special train leaves Chicago at 11.05 a. m., Sunday, June 5, going through Illinois, Northern Indiana and Michigan by daylight, reaching Detroit at 8.05 p. m. The train will pass Buffalo in the early hours of Monday, and is scheduled to reach Philadelphia at 3.40, the same afternoon, and Atlantic City at 6.05, Monday evening. The liberality of the Lehigh Valley company in providing a luxurious train and an easy itinerary that enables the excursionists to view the most picturesque region in the world, is worthy of that great corporation and its courteous officials.

Substitution—A Department Store Found Guilty.

WE HAVE all noticed the evolution of the department store from the country general store; from the little shop where one can get pretty nearly anything coming within the needs of man from a corn plaster to a set of false teeth, to the magnificent palaces of industry and trade of the big city of today, in which everything is found,—dry goods, and shiny silks and shimmering satins; rare jewels and pellucid pearls; green groceries, canned colics, shoes and slippers and jeans and jerseys; automobiles and art works; paints and powders and drugs, and where there is even a hospital ward room perfectly equipped and attended by a coolly-clad nurse in cap and uniform, with a “near-by physician in attendance.” We, in our ignorance of purely commercial business may have marveled at the perfection of the organisation, and at the same time been aware of the self-evident fact that in many of these carry-alls of commerce the sale of proprietary medicines was carried on “below cost,” and of the other painfully apparent

fact that substitution reared its ugly head high amid all the glories and beautiful bewitcheries of the fine things of feminine fancy.

In New York City this evil has been more arrogant than in Buffalo, and while the owners of the proprietary preparations have been endeavoring to put a stop to substitution, apparently the most vigorously aggressive action was taken when the Siegel-Cooper Company, of New York, began advertising a preparation known as "pepto-manganate." This was so evident a substitution and such a palpably bold and brazen attempt at larceny that the M. J. Breitenbach Company, owners of Gude's pepto-mangan, brought action against the dry goods concern for a permanent injunction, restraining it from using the words "pepto-manganate" or any other words simulating "pepto-mangan," and for an accounting of the sales of the substituted product; and for an order requiring the destruction of all material, bottles, labels and other printing used in the manufacture or sale of the substituted product. The action was tried before Justice Bischoff of the Supreme Court and resulted in a sweeping order, granting all the relief asked and all the claims set up in the complaint of the Breitenbach company. This decision is far reaching. It will have the effect of curbing the commercial activity of the department store insofar as the sale of substitutes for well-known and beneficial preparations is concerned. Justice Bischoff makes very strong his position as regards the invasion and violation of trade-mark and trade-name rights.

It was a bold stroke of business enterprise for the Siegel-Cooper Company to enter the proprietary field, but they committed the fatal error of claiming a relationship which did not exist. During the course of the action there was no question raised regarding the purity or the efficacy of the Siegel-Cooper Company preparation; that point was not on trial. Legally viewed the case merely involved the invasion of a trade-mark or trade-name right; morally it was the evil of substitution which was on trial—and decency and honesty were victorious.

The M. J. Breitenbach Company is deserving of praise and congratulation for the able and vigorous manner in which the fight was carried on and won.

Medicine and "Graft."

THE Physician's Club, of Chicago, had a dinner recently at which the main subject of discussion was "Graft." Several eminent laymen of the Windy City were present and gave their definitions of graft in various intelligent manner. Mr. William H. McSurley defined a "grafter" as "one who attaches

himself to some outside interest, some interest apart from the main motive of his life, for the purpose of getting from that outside interest something that will be beneficial to the main motive of his life." This is a clever definition and quite covers the ground from the standpoint of ethics.

Dr. Lydston mentioned the physician in politics and public affairs and said "the doctor who devotes a portion of his time to public affairs is forever damned in the eyes of the public and profession, while the reverse is true of the lawyer."

There are few lawyers who render public service without receiving pay for it. On the other hand, much is done by physicians who for years have labored for the public good, gaining nothing for their service save possibly the ill will of their fellow practitioners and the sneers of the well-served public. This has been illustrated frequently in recent years. For this condition of affairs the profession has itself to blame. There is a sad lack of unity. If a physician takes an active part in public affairs he is looked upon with suspicion; let him seek office and he is a "grafter;" let him raise his voice in any but a general way, except it be in accord with the cut and dried principles of professional utterance, and he is damned as a self-advertiser. The profession is broad-minded in a narrow way; it is encrusted with the tradition of musty ages.

A physician is by natural training a diplomat and is perforce politic in his dealings and, as a whole, the profession is politic; but there is a wide difference between being politic and political. The profession is too retiring; it is afraid of itself and as a consequence the members, who by right of education and training are fitted for the highest position in a community where public welfare should be considered paramount to political graft, sit back and are becoming the playthings of the practical politician who sees good only in graft, which in its properly understood, practical sense means getting something tangible, either money or position which brings money easily, without doing anything for it or giving an equivalent. It may be safely and truthfully said there is no graft among the legitimate practitioners of medicine.

Grocer Druggists.

IN MANY districts more or less far removed from drug stores it has been the custom for grocers to keep for sale such drugs as may be termed household medicines, such as paregoric, camphor, Rochelle salts, ammonia and in many cases carbolic acid and oxalic acid. The attention of the state board of pharmacy

was called to this fact some time ago and in order that there might be no quibble in correcting what was an evident danger, although unquestionably a convenience, the matter was submitted to Attorney-General Cunneen for his opinion as to the legality of the exposure for sale of the articles mentioned, among others, by the grocery men.

Mr. Cunneen has rendered an opinion at some length in which he views the matter dispassionately and in a logical manner. He decided that the sale by a grocer of any article coming under the head of drugs was illegal; that some of the articles mentioned in the communication from the pharmacists were used in the arts, such as oxalic acid, for example. Such articles may be kept for sale by grocers, but only for use in the arts and not to be disposed of in small quantities to families for household use. The opinion is one which may cause some inconvenience in neighborhoods where there is not a drug store, but it will definitely prevent the possibility of fatal error in dispensing by one who is neither qualified nor licensed to dispense poisons and drugs. The liability to error in the handling of oxalic acid and Rochelle salts is too well-known to need more than a passing reference. The dispensing of drugs should properly be confined to licentiates in pharmacy,—just where Mr. Cunneen's decision places it for good and all.

DEATHS from the bites of serpents are numerous in Asia and in Africa. Dr. S. Weir Mitchell, of Philadelphia, says *The Tribune*, for several years carried on researches of no small importance with regard to the venom of poisonous snakes, and announced finally that he had discovered no effective antidote. At the annual meeting of the Association of American Physicians, in Washington, Dr. Mitchell is said to have informed his medical associates that he had received a letter from Dr. Noguchi, of Japan, who has been working at the Serum Institution, in Copenhagen, setting forth the discovery of a serum which will cure the sufferer from the bite of a rattlesnake. Will this antidote prove efficacious also against the venom of the cobra and other deadly serpents? If so, it will be of remarkable benefit to mankind, especially among the natives of India.

THE new board of regents, reduced and consolidated, held a meeting at the Capitol in Albany, April 26, 1904, at which White-law Reid was elected chancellor and Saint Clair McKelway vice-chancellor of the university.

The board confirmed the following-named appointments by Commissioner Draper: First assistant commissioner, in charge

of technical and professional education, Howard J. Rogers; second assistant commissioner, in charge of academies and high schools, Edward J. Goodwin; third assistant commissioner, in charge of primary education, Augustus S. Downing; director of libraries, Melvil Dewey. Each of the four has a salary of \$5,000.

John M. Clarke was made director of science work at a salary of \$3,600.

The following-named heads of administrative departments were appointed: accounts, William Mason, salary, \$2,500; attendance, James D. Sullivan, \$3,000; examinations, Charles F. Wheelock, \$4,000; inspections, Frank H. Wood, \$3,500; law, Edwin N. Holbrook, \$3,500; records, Charles E. Fitch, \$2,500; statistics, Hiram C. Case, \$2,400.

A WOMAN, upon whose child Velpeau, the great French surgeon, had performed a most difficult operation, according to *The Argonaut*, called upon him, full of gratitude, and presented him with a pocketbook which she had embroidered with her own hands. Velpeau received the testimonial very crustily, saying that it was a beautiful pocketbook, and all that, but that his necessities demanded something more substantial. "My fee," he said, coldly, "is 5,000 francs." The woman very quietly opened the pocketbook, which contained ten one-thousand-franc notes, counted out five, and, politely handing them to Velpeau, retired.

Dr. G. C. MARTIN, instructor in paleontology at Johns Hopkins, has been appointed by the government as head of an expedition to Alaska next summer to investigate the recently discovered coal and oil fields, and to complete maps of the unknown portions of the peninsula.

ANTONIUS, the boy wonder, (aged 40) has, through a lawyer, recently filed notice that he would appeal to the Court of Appeals from the conviction of conspiring to defraud the public by a fake healing scheme. The appellate division recently affirmed the conviction. Weichers, the culprit's alleged real name, was sentenced to about a year in the penitentiary, but is out on bail.

IT SEEMS we were in error in stating in our May edition that New York City was about to witness the passing of the coroner. Mayor McClellan has seen fit to veto the bill for what seemed to him, we presume, good and sufficient reasons. In general, we favor the substitution of medical examiners for coroners, and shall consider the state at large fortunate when it shall so provide by law.

There seems to be considerable opposition to the bill just vetoed in New York City, the *Post-Graduate*, among other journals, approving Mayor McClellan's action. However, the Mayor is in error when he says the medical examiner system has not worked satisfactory in other places or states. In Massachusetts, where it has been in vogue for some years, it meets approval, and in Erie county, where it has been in operation two years or more, it has proved a great improvement over the old system.

WE HAVE received recently a polite invitation to become a subscriber to the *Brooklyn Medical Journal*, accompanied by the usual "specimen copy." The invitation enumerates the qualities of the journal, among which it modestly says it is "the best medical journal published in New York State." This reminds us of the old story of the prisoner awaiting trial, who said to a visitor one morning,—one of his old associates,—“Bill, I'm going to be acquitted next week.” “How d'ye know, Jim?” “Why, I've the best lawyer in the city to defend me, and he says he'll clear me.” “Who is he?” “Parkinson.” “Parkinson, why I never heard of him. How d'ye know he's the best lawyer in the city?” “Why,—because—why—be—he admits it himself.”

PERSONAL.

Dr. CHARLES A. L. REED, of Cincinnati, delivered the address at the annual commencement of the Army Medical School at Washington, April 5, 1904, choosing for his subject, The medical profession in the public and private life of America. It is almost needless to add that this unique subject was dealt with in a liberal and masterful fashion. The address is published in full in the *Journal of the American Medical Association*, May 14, 1904.

Dr. EDWARD N. BRUSH, superintendent of the Sheppard and Enoch Pratt Hospital, near Baltimore, visited Buffalo during the university commencement in May. He is president of the class of '74, which held a reunion on that occasion.

Dr. CHAUNCEY PELTON SMITH, who has been confined to his home for several weeks as the result of an accident in which his leg was fractured, has recovered and resumed his professional practice. He has removed from No. 481 Franklin street, to The Raleigh, No. 354 Franklin street. Hours: 9 to 10 a. m., 2 to 3 p. m. and 8 p. m. Telephone: Tupper 412.

Dr. WILLIAM H. THORNTON, of Buffalo, removed May 1, 1904, from 572 Niagara street to 231 Norwood avenue, corner of West Utica street. Hours: 8 to 9 a. m., 2 to 3 and 7 p. m. Sundays by appointment. Both telephones.

Dr. WILLIAM IRVING THORNTON removed May 1, 1904, from 152 Jersey street to 572 Niagara street, the former office of Dr. William H. Thornton. Hours: 8 to 9 a. m., 2 to 3 and 7 to 8 p. m. Sundays, 9 a. m. and 2.30 p. m. Both telephones.

Dr. A. B. KNISLEY, of Buffalo, announces the removal of his office and residence to No. 56 Woodlawn avenue. Hours: 12.30 to 1.30 and 7 to 8 p. m. Telephones: Bell, Bryant 574; Frontier, 1602. Branch office, 360 Swan street. Hours: 2 to 4 p. m. Telephone: Bell, Howard 228.

Dr. JOHN J. TWOHEY, of Buffalo, has removed his office and residence from No. 301 Masten street, to 2200 Main street. Telephone: Park 121.

Dr. DAVID WHEELER, of Buffalo, has been appointed an attending physician at the Erie County Hospital in the department of genitourinary surgery.

Dr. J. MACDONALD, JR., of New York, secretary of the Medical Editors' Association, has received the degree of doctor in medicine from the Baltimore University School of Medicine.

Dr. W. E. MERRIMAN, of Albany, has been appointed assistant surgeon of the Soldiers' and Sailors' Home at Bath, vice Dr. Cameron Haskell, promoted.

Dr. WILLIAM P. SPRATLING, superintendent of the Craig Colony for Epileptics at Sonyea, has been appointed superintendent of Bellevue Hospital at New York.

Dr. CAMERON HASKELL has been promoted from assistant surgeon to chief surgeon at the Soldiers' and Sailors' Home, at Bath, vice Dr. W. L. Babcock, resigned.

Dr. WILLIAM MABON, of New York, superintendent of Bellevue Hospital, has been appointed by Governor Odell, president of

the State Commission in Lunacy, vice Dr. Frederick Peterson, resigned.

Dr. ROBERT P. BUSH, of Horseheads, N. Y., former speaker of the Assembly, attended the annual commencement of Buffalo University in May. He was elected a member of the board of trustees of the Alumni Association.

Dr. LEE A. WHITNEY, of Buffalo, has been appointed from the state civil service eligible list to be resident physician at the State Hospital for crippled and deformed children at Tarrytown, at a salary of \$900 a year.

Dr. ROSWELL PARK, of Buffalo, was elected president of the Liberal Club, at its meeting held May 6, 1904. The Liberal and Independent clubs were consolidated and Dr. Park becomes president of the united organisation, this action having been taken while he was on the way home from Europe.

Dr. EDWARD E. KOEHLER, of Buffalo, announces the removal of his office and residence from 696 Broadway, to 715 Broadway, corner Krettner street.

Dr. JOHN S. HALBERT, of Buffalo, who has lived at 459 Franklin street for eight years, has leased his house and removed to the old family homestead, 2485 Main street.

Dr. F. W. MCGUIRE, of Buffalo, announces the removal of his office and residence to 1175 Main street, corner of Dodge. Hours: 8 to 9 a. m., 1 to 3 and 7 to 8 p. m. Telephone: Bryant 144.

Dr. HARRY R. TRICK, of Buffalo, has leased the offices of the late Dr. C. C. Wyckoff, 482 Delaware avenue.

Dr. WARREN L. BABCOCK, chief surgeon at the State Soldiers' Home Hospital, Bath, N. Y., resigned May 12, 1904, to accept the superintendency of Grace Hospital, Detroit, Mich.

Dr. E. R. MCGUIRE announces the removal of his office and residence to 1175 Main street, corner of Dodge. Hours: 8 to 9 a. m., 1.30 to 2.30 and 7 to 8 p. m. Telephone: Bryant 144.

OBITUARY.

Dr. JOHN MILTON DUFF, of Pittsburg, died at his home, May 14, 1904, of septicemia, aged 55 years. He was a soldier of the civil war, having enlisted in Company B, 107th Regiment, Pennsylvania volunteers. After the war he studied medicine and graduated from Jefferson Medical College in 1874. He practised his profession in Pittsburg and became professor of gynecology in the Western Pennsylvania Medical College. He was also obstetrician-in-chief and abdominal surgeon to the Rhineman Hospital, consulting surgeon and gynecologist to the South Side Hospital; Fellow of the American Academy of Medicine; Fellow of the American Association of Obstetricians and Gynecologists, and was chairman of the section on obstetrics and gynecology in the American Medical Association in 1893. Dr. Duff was a man of forceful character, amiable disposition and a physician of distinction.

Dr. HENRY DOWNER INGRAHAM, of Buffalo, died at his residence, 405 Franklin street, May 23, 1904, after a long illness. This information was received while these columns were going through the press. An appropriate memorial will appear in the next issue of the JOURNAL.

Dr. CLINTON CUSHING, of San Francisco, died at his winter home at Washington, D. C., May 10, 1904, aged 63 years. He graduated from Rush Medical College in 1865, and removed to California during the same year. He served as a medical officer in the United States navy in the early 60's; later he became professor of gynecology in the Cooper Medical College and consulting surgeon to the French Hospital. He was a founder of the American Association of Obstetricians and Gynecologists, but resigned in 1900, on account of ill health. During his active career he was one of the most prominent abdominal surgeons on the Pacific coast.

Dr. ROBERTS BARTHOLOW, of Philadelphia, died at his home May 10, 1904, aged 72 years. He was a distinguished author and teacher, first at Cincinnati, and then at Philadelphia, and had been an active and honorary member of numerous medical societies.

Dr. E. A. BAIR, of Buffalo, died April 23, 1904, aged 35 years. He graduated at the University of Buffalo in 1897, and was a physician of considerable promise.

Dr. FRANK P. BLAIR, of Allegany, N. Y., a graduate of Albany Medical College, 1877, died May 21, 1904, aged 60 years.

Dr. GEORGE HUMPHREY GOLTRY, a graduate of the University of Buffalo, class of 1860, died at his residence near Irelandville, N. Y., April 16, 1904, aged 71 years.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the months of April and May as follows:

Section on Obstetrics and Gynecology.—Tuesday evening, April 26. Program: The relation between neurasthenia and diseases of the female generative organs, Herman B. Singer.

Section on Surgery.—Monday evening, May 2. Program: The *x*-ray in diagnosis and treatment; presentation of cases; suggestions for treatment of *x*-ray burns, Sidney A. Dunham; discussion by Drs. Bayliss, Preiss and O'Gorman.

Section on Medicine.—Tuesday evening, May 10. Program: Spinal cord tumors, William C. Krauss; discussion by Floyd S. Crego. Recurrent vomiting in children, Irving M. Snow; discussion by Eli H. Long.

Section on Pathology.—Tuesday evening, May 17. Program: Observation on intestinal parasites in troops returned from the Philippine Islands, with demonstrations, H. M. Hallock, Captain U. S. A. Short communications and demonstrations by N. G. Russell, Irving M. Snow, Harvey R. Gaylord, and G. H. A. Clowes.

THE following societies will meet at Atlantic City, during early June, 1904, namely: American Medical Association, June 7-10; American Academy of Medicine, June 4-6; American Gastroenterological Association, June 6; Association of American Medical Colleges, June 7; American Medical Editors' Association, June 6; American Orthopedic Association, June 7-9; American Urological Association, June 10-11; National Association of United States Pension Examining Surgeons, June 6-7; National Confederation of State Medical Examining and Licensing Boards, June 6; Medical Society of the State of New Jersey, June 4-7.

THE American Association of Obstetricians and Gynecologists will hold its seventeenth annual meeting at Saint Louis, Tuesday, Wednesday, Thursday and Friday, September 13, 14, 15 and 16, 1904, under the presidency of Dr. Walter Blackburn Dorsett. The sessions will be held daily from 9.30 a. m. to 2 p. m., with

a ten-minute recess at noon. There will be no other sessions during the day or evening. The headquarters will be at the Hotel Monticello. The medical profession is cordially invited.

THE Medical Society of the County of Erie will hold its eighty-third semi-annual meeting at the Buffalo Library Building, Tuesday, June 14, 1904, at 10 o'clock a. m., under the presidency of Dr. William C. Krauss, of Buffalo. The program is in preparation and will be issued early in June.

THE American Microscopical Society will hold its twenty-fifth annual meeting in Buffalo, August 23, 24 and 25, 1904. The first meeting of this society was held in Buffalo in 1879, which again entertained the society in 1889, and it is therefore fitting that the silver celebration should be held here this year. The coöperation of physicians and scientists is cordially invited. Further particulars of the meeting will be published in the August number of the JOURNAL.

COLLEGE AND HOSPITAL NOTES.

HOSPITAL APPOINTMENTS.—The following-named graduates in medicine of the University of Buffalo, class of 1904, have received appointments as internes:

Buffalo General Hospital.

Frederick S. Brickell,
Melvil S. Coxe,
Claude S. Johnson,
L. Kauffman,
Edward C. Koenig,
Harry R. Lohnes,
Victor M. Rice,
Floyd Richardson,
Robert F. Sheehan, Jr.,
Herbert N. Squier.

Sisters of Charity Hospital.

Edward J. Durney,
Thomas F. Foley,
William S. Lynch.

Erie County Hospital.

Parker G. Borden,
John F. Fairbairn,
Chauncey W. Grove,
John G. Morris,

Erie County Hospital—Continued.

Douglass H. Smith,
John L. Van DeMark,
Glenn L. Whiting.

Emergency Hospital.

John H. Burke,
John C. Plain,
Raymond A. Turnbull.

German Hospital.

Robert C. Mehnert,
Samuel A. Moore,
Herman W. Schlappi.

Deaconess's Hospital.

Leonard Reu,
Julius Richter,
Charles W. Selover.

Rochester City Hospital.

Halley W. Hammond.

THE Buffalo General Hospital has issued its forty-fifth annual report which covers the year 1903, and which is by far the most complete it has ever sent out. The president of the board of trustees, Mr. Stephen M. Clement, makes a very clear and interesting statement of the affairs of the hospital, which betrays the business man and the financier. He speaks of the debt which has been cleared off during the year, mention of which has been made heretofore in the JOURNAL. The hospital, however, is still without proper endowment, about \$200,000 additional being necessary.

The first training school for nurses west of New York City was founded in this hospital in 1877, since which time 271 nurses have been graduated. A new nurses' home is building which will accommodate 64 inmates, thus adding a much needed improvement to this service. During 1903, 2,635 patients were treated at an expense of \$1.47 a day for each individual. The report is handsomely printed and well illustrated.

BOOK REVIEWS.

HOWE'S HANDBOOK OF PARLIAMENTARY USAGE. Arranged for the instant use of legislative and mass meetings, clubs and fraternal orders, teachers, students, etc. By FRANK WILLIAM HOWE. New York: Hinds & Noble. (Price, 50 cents.)

Usually, when a physician is called to the chair in a public meeting he takes it with no little embarrassment because of his ignorance of parliamentary usage. Every physician should acquaint himself sufficiently with the simpler rules of legislation to preside with dignity, and to facilitate the prompt transaction of business. This is the best pocket-size digest of the subject we have seen and should be carried by every person likely to be called to the chair; indeed, it may be said that all members should be as well versed in parliamentary usage as the chair itself, hence all should study it. It is inexpensive, convenient and useful; moreover, it is authoritative, being compiled from the best manuals,—Cushing, Robert, Reed, and Palmer. It is properly named—the instantaneous arbitrator.

TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION. Twenty-seventh annual meeting held at Washington, D. C., May 12-14, 1903. Charles J. White, M.D., Secretary. New York: The Grafton Press.

The transactions of this society always possess special interest for the dermatologist, because they contain the latest thought of the best observers in this important branch of medicine; and, again, because rare cases of disease of the skin are described and

illustrated,—conditions that often are not met more than once or twice in a lifetime of such experience.

In the present volume Dr. G. W. Wende, of Buffalo, presents a paper of this nature entitled, *Sarcomatosis cutis*, with two illustrations, the first showing the lesions in situ on the right leg of the patient, and the second being a microphotograph of a section of the growth, showing round cell infiltration around bloodvessels and glands, as seen when the lesions first appeared.

The volume contains several other papers detailing rare skin lesions, some of which are illustrated. The work done by the society and herein recorded indicates a splendid organisation of trained men, working together for the advancement of an important branch of medical science.

BIOGRAPHIC CLINICS. Volume II. The Origin of the Ill Health of George Eliot, George Henry Lewes, Wagner, Parkham, Jane Welch Carlyle, Spencer, Whittier, Margaret Fuller Ossoli and Nietzsche. By GEORGE M. GOULD, M.D., editor of *American Medicine*. Duodecimo, pp. 392. Philadelphia: P. Blakiston's Son & Co. 1904.

The author of this unique, theoretical study into the causes of the ill health of these distinguished personages, seems dissatisfied with the treatment his first volume received at the hands of the reviewers. He says that scarcely one summarised a clear and satisfactory statement of the thesis, facts, and arguments of the book. He thinks a great mistake is made in underestimating the importance of eyestrain. We were of the opinion that this subject was one that was receiving due attention by the profession, thanks to the efforts of our ophthalmologic specialists of which there is, at least, not a scarcity.

We have no disposition to quarrel with our distinguished friend in his contention, nor do we feel like going into a lengthy analysis of his "clinics." We prefer to make suitable reference to them in these columns, merely inviting attention to their entertaining character and let each, for himself, judge of their intrinsic worth as contributions to medical science.

MOTHER AND DAUGHTER. Advice to the Maiden, Wife and Mother. By C. A. BUTTON, M.D., Holland, N. Y. Holland Medical Company, Holland, N. Y. (Price, \$1.00.)

A manual of this kind for household reading and guidance is sometimes of value, especially when placed in the hands of intelligent persons. This book may be read with benefit by every mother intelligent enough to appreciate the importance of proper hygiene, or who can properly apply the simple directions given for many conditions needing attention pending the arrival of a physician.

The principle underlying the book from cover to cover is that the first thing to do in case of illness is to send for a competent physician; meanwhile, in certain conditions some of the advice

herein given may be applied. Despite its defects in style and faulty construction here and there, it is a household manual of considerable value.

PREVENTIVE MEDICINE. Two Prize Essays: The General Principles of Preventive Medicine, by W. WAYNE BABCOCK, M.D.; the Medical Inspection of Schools, a Problem in Preventive Medicine, by LEWIS S. SOMERS, M.D. Published by The Maltine Company, Brooklyn. 1903.

These essays, it will be remembered, were selected out of 209 presented in competition for prizes offered two years ago by The Maltine Company. The committee met in Buffalo to make the awards, which were promulgated October 18, 1902. The following paragraph from the report is of sufficient interest to reproduce: "In submitting this report the committee congratulates you (The Maltine Company) upon the wide spread interest which you have aroused in the very important subject of preventive medicine, and it congratulates the medical profession and the public upon the great good that will follow the publication of the valuable addition to literature thus evoked by your enterprise." Signed, Daniel Lewis, (New York); Charles A. L. Reed, (Cincinnati); John Edwin Rhodes, (Chicago).

It is sufficient for us to add that these essays are published in one volume for gratuitous distribution, by The Maltine Company, and may be obtained upon application to the publishers.

THE COMPLETE MEDICAL POCKET-FORMULARY AND PHYSICIAN'S VADE-MECUM. Containing upwards of 2,500 prescriptions, collected from the practice of physicians and surgeons of experience, American and foreign. Also a special list of new drugs, with dosage, etc. By J. C. WILSON, A.M., M.D., physician to the German Hospital, Philadelphia. Third revised edition. Philadelphia: J. B. Lippincott Company. (Price, \$1.75; thumb indexed, \$2.)

The preparation of this reference manual containing about twenty-six hundred prescriptions represents a surprising amount of work. Each formula must be given with the greatest care, lest error creep in which would be capable of great harm. The proof reading of such fine type taxes the eye and the patience to an extreme degree. It is as complete as it is possible to make such a work and is capable of doing great good to the profession. It is useful to the junior physician whose repertory of prescriptions is necessarily somewhat limited, and to the older practitioner whose memory needs refreshing. It contains, besides, a special list of new remedies, their therapeutic applications, and dosage; table of formulæ for suppositories; formulæ for hypodermic medication; list of drugs for inhalation; poisons and their antidotes; a posological table; list of incompatibles; table of weights and measures; list of disinfectants, and numerous other useful hints.

THE COMMONER DISEASES OF THE EYE. HOW TO DETECT AND HOW TO TREAT THEM. By CASEY A. WOOD, C.M., M.D., D.C.L., Professor of Clinical Ophthalmology in the University of Illinois, and Thomas A. Woodruff, M.D., C.M., L.R.C.P., London, Professor of Ophthalmology in the Post-Graduate Medical School, Chicago. Duodecimo, pp. 500, with 250 illustrations, many of them original, of which 7 are colored plates. Chicago: G. P. Englehard & Company. 1904.

In this duodecimo volume of five hundred pages, the authors have undertaken to present ophthalmology to the student and general practitioner in such a way that the more common and important diseases of the eye may be intelligently diagnosticated and treated. The text is clear and concise and is abundantly illustrated by well-executed engravings.

The several chapters include brief references to anatomy and physiology, and a fairly full consideration of refraction and its errors, and of most of the diseases of the eye and its appendages, together with the recognised and most recent methods of examination, diagnosis and treatment. Besides these, there are special and most timely chapters on the commoner pathogenic bacteria that invade the eye, remedies commonly used in ophthalmic practice, the fundamentals of ocular hygiene, headache from eye-strain, ophthalmology in general medicine and surgery, and ocular signs and complications of certain systemic diseases. Throughout the work the needs of the student and general practitioner have been carefully met, and the reviewer believes that, as an introduction to the study of ophthalmology, it has no equal in our language at the present moment.

A. A. H.

THE TREATMENT OF FRACTURES: WITH NOTES UPON A FEW COMMON DISLOCATIONS. By CHAS. L. SCUDDER, M.D., Surgeon to the Massachusetts General Hospital. Fourth edition. Thoroughly revised, enlarged and reset. Octavo volume of 534 pages, with nearly 700 original illustrations. Philadelphia, New York, London: W. B. Saunders & Company. 1903. (Polished buckram, \$5.00 net; sheep or half morocco, \$6.00 net.)

Testimony as to the value of this treatise may be cited in the unexampled demand for new editions, this being the fourth in as many years. There is no branch of surgery that tests the competency of a surgeon more than the treatment of fractures. Unless one has an aptitude for this work he had better abandon it at once, or still better, never begin it. The young practitioner is always put to his mettle in dealing with broken bones. There is no treatise on the subject at the present time that will prove as helpful to him as this one; it is the next thing to the clinic itself.

The author has added many half-tone illustrations to this edition, thereby enhancing its value. The text, too, has been increased somewhat, and a chapter on a few common dislocations has been appended. Attention should be invited to the remarkable fact that this book of 534 pages contains 688 illustrations,—a proportion rarely equaled in a medical publication. Scudder has

a talent for dealing with fractures and dislocations and he has displayed it to the best advantage in this superb treatise.

A HANDBOOK OF OPHTHALMIC SCIENCE AND PRACTICE. Third Edition. Revised and enlarged. By HENRY E. JULER, F.R.C.S., Ophthalmic Surgeon to St. Mary's Hospital; Consulting Surgeon to the Royal Westminster Ophthalmic Hospital; Consulting Ophthalmic Surgeon to the London Lock Hospitals. Octavo, 733 pages, with 190 illustrations and 25 full-page plates in colors and black. Lea Brothers & Company, Philadelphia and New York. 1904. (Cloth, \$5.25 net.)

It is now twenty years since the first edition of Juler's Handbook was published. From the outset it has been recognised by ophthalmologists and teachers as one of the most complete and trustworthy works on the eye. During all of this time the English medical schools have made it their leading textbook. It covers the whole range of ophthalmology, including a full exposition of the anatomy and physiology of the eye. Mr. Juler has the faculty of expressing himself concisely and at the same time clearly, and his skill in compressing a large amount of information into a small space is certainly quite unusual.

The present edition has been brought fully up to date, and includes an intelligible reference to almost every known disease of the eye. It is most excellently illustrated, both in black and colors, and is in every way well gotten up. To those who desire a reliable and complete work in this department of medical science, this one is to be commended. Indeed, there are few books on the subject that contain so much that is of practical use to the student and practitioner.

A. A. H.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten Volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume III. The Eye, Ear, Nose and Throat. Edited by Casey A. Wood, M.D., Albert H. Andrews, M.D., and Gustavus P. Head, M.D. Duodecimo, 332 pages. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$5.50, payable in advance.)

The year books arrive with the same regularity as the years themselves. It seems but a short time since this series was inaugurated, yet this is the third time these subjects have been presented, and by the same editors. But little change has been made in the plan, except a reduction in price, rendered feasible we presume by increased sales. The wealth of literature in these branches as in others proves a great embarrassment to the compilers, but, it must be confessed, they have done well in selecting and condensing. It should be borne in mind that this series of year books is intended for the general practitioner in particular, the object being to give him such information as will keep him in touch with all branches of medicine. At the same time, the

arrangement is such, that separate volumes may be obtained by those interested in special subjects, without the necessity of purchasing the entire set. The laryngological part of this number is of unusual interest and places in the hands of the general physician, who must needs do some of this work, a mass of helpful material. By and large, the series furnishes one of the best year books, and at a price that makes it possible to all.

THE BLUES, (SPLANCHNIC NEURASTHENIA), CAUSES AND CURE. By ALBERT ABRAMS, A.M., M.D., (Heidelberg), F.R.M.S., Consulting Physician, Denver National Hospital for Consumptives, the Mount Zion and the French Hospitals, San Francisco. Duodecimo, pp. 240. Illustrated. New York: E. B. Treat & Co. 1904. (Price, \$1.50.)

The title of this book though bizarre is impressive; it is unscientific but "fetching." The author offers as a reason for the term "blues," the statement that "it appeals with cogent significance to the sufferer,"—apparently the person for whom the book is really intended, it being written upon lines to interest the laity.

The author has called attention to many conditions of importance and has restated many facts of known value and significance in relation to neurasthenia; especially are his remarks regarding the sexual hypochondriac of excellent quality. But in all the essential points upon which he places emphasis there is not much that is novel. The most that can be said is that Abrams has given new names or new locations to some old conditions that are pretty well understood.

It is a readable book, written in attractive style and will do every physician good who will take the pains to read it with care. The method of treatment by automassage is at least not harmful and may serve to amuse if it does not absolutely cure.

THE SELF-CURE OF CONSUMPTION WITHOUT MEDICINE. With a Chapter on the Prevention of Consumption and Other Diseases. By CHAS. H. STANLEY DAVIS, M.D., Meriden, Conn. Pages, 176. New York: E. B. Treat & Co. 1904. (Price, 75 cents.)

Much may be learned by the unprofessional person from reading this book. It tells many things that every person should know, and it teaches some things even to the professional reader. The author is quite right when he asserts, rather as a refrain pervading the entire brochure than as a dogmatic asseveration, that the successful management of the consumptive depends upon the patient, upon the care he takes of himself and the thoroughness with which he carries out the intelligent directions of a competent medical adviser, rather than upon the ingestion of drugs, many of which prove harmful instead of beneficial. Cough mixtures are especially to be condemned.

The directions given in regard to proper breathing are of great value and may well be heeded by every person; correct

breathing is an essential to good health, even for those who are in no special danger of consumption. We repeat, this book contains much that will benefit both profession and laity.

PROGRESSIVE MEDICINE. Volume I, March, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 337 pages, 7 illustrations. Philadelphia and New York: Lea Brothers & Co. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

The volume for March, 1904, deals with surgery of the head, neck and thorax, by Charles H. Frazier; infectious diseases, including acute rheumatism, croupous pneumonia, and influenza, by Robert B. Preble; diseases of children, by Floyd N. Crandall; laryngology and rhinology, by Charles P. Grayson; and otology, by Robert L. Randolph. This copy is bound in paper and is stamped on the front cover in large red letters, "For Review." We think these two innovations detract from the hitherto handsome appearance of this excellent periodical. The material, however, maintains the high level established by the editors and well sustained by the contributors.

A COMPEND OF PATHOLOGY, GENERAL AND SPECIAL. A Student's Manual in one volume. By ALFRED EDWARD THAYER, M.D., Professor of Pathology, University of Texas. Duodecimo, pages 711; 131 illustrations. Second edition. Philadelphia: P. Blakiston's Son & Co. 1903.

Two years ago Professor Thayer issued two compends on pathology, which are now merged in one book and are here presented in a handsome volume in black flexible leather, with rounded corners and gilt edges. While, manifestly, it is a book intended for the undergraduate student, it is yet one that may be studied with profit by the practitioner who needs to refresh his memory on old points, or to familiarise himself with newer ones. The method adopted by the author in presenting his subject is simple, direct, and entertaining; his science is well grounded and his language forceful without being diffuse. His instructions for tests, cultures, and blood examinations such as Widal's, are clear and pointed. On the whole, it is a most satisfactory manual and will increase in popularity through the present style of issue.

BLAKISTON'S QUIZ COMPENDS. Compend of Diseases of the Nose, Throat and Ear. By JOHN JOHNSON KYLE, B.S., M.D., Lecturer on Otology, Rhinology and Laryngology in the Medical College of Indiana, Indianapolis. Pages, 280, with 85 illustrations. Philadelphia: P. Blakiston's Son & Co. 1903. (Price, 80 cents.)

The fundamentals of laryngology are set forth in the form of a compend in this book, and in a manner to meet the requirements

of the student approaching examination day, as well as the junior practitioner, who must of necessity treat the ear, nose, and throat in a limited capacity. It presents in this fashion the best condensed thought of the most accepted authorities on this subject, and may be appealed to with safety and satisfaction. In brief, there is no better epitomised laryngology than the Kyle compend.

TRANSACTIONS OF THE NEW YORK ACADEMY OF MEDICINE. Semi-centennial Celebration, 1896-1901, including the Semi-centennial Celebration Addresses, January 29, 1897, and List of Papers read at Stated Meetings of the Academy. Printed for the Academy. New York. 1903.

The addresses in this book are of special interest and deserve preservation in permanent form. That of the Hon. Grover Cleveland, then President of the United States, is published in facsimile. One of the most interesting papers in the volume is the memorial address on Joseph O'Dwyer, by W. P. Northrup. It tells the story of intubation from its inception to its perfection, all through the struggles of the inventor from obscurity to fame, the death of his lovely wife, and the final breakdown of the talented genius of the laryngeal tube. It is a touching story of disappointments, trials and triumphs, that cannot fail to reach the heart.

The New York Academy of Medicine is rich in its memories, rich in its traditions, rich in its accumulated medical lore; the present volume is evidence of the truthfulness of these statements. May its shadow never grow less!

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Volume 28. For the year 1903. Twenty-eighth annual meeting held at Washington, D. C., May 12-14, 1903. J. Riddle Goffe, M.D., Secretary. Philadelphia: William J. Dornan, Printer.

An examination of this volume discloses the melancholy fact that many of the veterans of this great society are passing away. Herein are recorded the memorials of John Byrne, Gaillard Thomas, and Edward Jenks,—nature's noblemen all. Most of the papers printed in this book are written by newer members, though a few veterans are still in the field and some of them occupy its center. The president, Janvrin, discourses most ably and clearly upon the surgical treatment of cancer. He advises hysterectomy, either vaginal or abdominal, as the only operation when the diagnosis is early made. He approves, however, of other operations in later diagnoses, for cosmetic and other reasons.

The newer members,—Coe, Vineberg, Harris, Charles P. Noble, Manton, Burrage, Goffe, and Clark,—have presented a valuable group of papers; and the veterans, Johnson, Palmer, Mann, as well as Janvrin, have not lost one whit of the old vim, as shown by their papers and discussions.

When the American Gynecological Society starts out to make an interesting book in which it records its annual proceedings it is a great success. When, however, it permits a coterie of its membership to endeavor to persuade a certain group of the Fellows of the American Association of Obstetricians and Gynecologists to join its ranks, it cannot be regarded as having reached its highest function. It is quite time such tactics should cease; it has never won over the men who have been the real object of its crusade and it never will. Those men have nothing but contempt for the men who engage in it, though the very highest respect for those other dignified, erudite, and distinguished men who constitute the majority.

Diverted for the moment from our original purpose, we return to it with the object of once more accentuating the value of the work which this society puts out each year, and of remarking in particular that the present volume is quite up to the high ideal of the leading members of this scientific body of professional workers.

TRANSACTIONS OF THE STATE MEDICAL ASSOCIATION OF TEXAS. Thirty-fifth Annual Session held at San Antonio, Texas, April 28 to May 1, 1903. H. A. West, M.D., Secretary.

The medical profession of the state of Texas has been distinguished for many years as maintaining a high standard of efficiency and proficiency, due in a large measure if not entirely to the influence of the association from which this book emanates. For many years these transactions were edited by Dr. Hamilton Atchison West, who died December 30, 1903, this volume being almost his last work,—entirely so in a literary sense, we believe. To Dr. West, more than to any other man, does the Texas profession owe its present status, and to him is it indebted for its *esprit de corps*, which is of a very high order. The present volume is quite the largest and best ever issued by the association, and indicates a future of great moment if the organisation progresses, as no doubt it will, on the lines already laid down. It is to be hoped that the association will not be betrayed by the *ignis fatuus* of state journalism. To abandon its splendid volume of annual transaction for the weak and imperfect monthly state journal, would be to exchange a strong individuality for a mediocre position in the publication of its transactions.

BOOKS RECEIVED.

Manual of Materia Medica and Pharmacy. Specially designed for the use of Practitioners and Medical, Pharmaceutical, Dental, and Veterinary Students. By E. Stanton Muir, Ph.G., V.M.D., Instructor in comparative Materia Medica and Pharmacy in the University of Pennsylvania. Third edition, revised and enlarged. Octavo, 192 pages. Philadelphia: F. A. Davis Company. 1904. (Price, \$2.00 net.)

Lea's Series of Medical Epitomes. Pediatrics. A Manual for Students and Practitioners. By Henry Enos Tuley, A.B., M.D., Professor of Obstetrics in the Medical Department of Kentucky University, Louisville. Duodecimo, pp. 266, with 33 engravings. Series edited by V. C. Pedersen, M.D., Instructor in Surgery at the New York Polyclinic Medical School and Hospital. New York, Philadelphia: Lea Brothers & Co. 1903. (Price, \$1.00.)

The Medical News Pocket Formulary. By E. Quin Thornton, M.D., Assistant Professor of Materia Medica in the Jefferson Medical College, Philadelphia. New (sixth) edition. Leather, wallet shape for the pocket. Philadelphia and New York: Lea Brothers & Co. 1904. (Price, \$1.50 net.)

A System of Practical Surgery. By Prof. E. von Bergmann, M.D., Berlin; Prof. P. von Bruns, M.D., Tubingen, and Prof. J. von Mikulicz, M.D., Breslau. Volume II. Surgery of the Neck, Thorax and Spinal Column. Translated and edited by William T. Bull, M.D., Professor of Surgery, College of Physicians and Surgeons, New York, and Carlton P. Flint, M.D., Instructor in Minor Surgery. Royal octavo, pp. 820. Illustrated. Lea Brothers & Co., New York and Philadelphia. 1904. (Price: cloth, \$6.00; leather, \$7.00; half morocco, \$8.50 net.)

A Practical Treatise on Medical Diagnosis for Students and Practitioners. By John H. Musser, M.D., Professor of Clinical Medicine in the University of Pennsylvania. Fifth edition, revised and enlarged. Octavo, pp. 1213; 395 engravings and 63 colored plates. Philadelphia and New York: Lea Bros. & Co. 1904. (Price: cloth, \$6.50; leather, \$7.50; half morocco, \$8.00 net.)

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia. Volume I. Fourteenth series. 1904. Philadelphia: J. B. Lippincott Company. (Cloth, \$2.00.)

Röntgen Ray Diagnosis and Therapy. By Carl Beck, M.D., Professor of Surgery in the New York Post-Graduate Medical School and Hospital; Visiting Surgeon to Saint Mark's Hospital and the German Poliklinik. Octavo, pp. 479, with 322 illustrations. New York and London: D. Appleton & Co. 1904. (Price, \$4.00.)

A Guide to the Clinical Examination of the Blood for Diagnostic Purposes. By Richard C. Cabot, M.D. Octavo, pp. 569. Illustrated. Fifth revised edition. New York: William Wood & Co. 1904. (Price, \$3.50.)

Graves's Disease with and without Exophthalmic Goitre. By William Hanna Thomson, M.D., LL.D., Physician to the Roosevelt Hospital, New York. Octavo, pp. 143. New York: William Wood & Co. 1904. (Price, \$1.50.)

Proceedings of the American Medico-Psychological Association at the fifty-ninth annual meeting held at Washington, D. C., May 12-15, 1903. C. B. Burr, M.D., Secretary. Published by the Association. 1903.

A Manual of Fever Nursing. By Reynold Webb Wilcox, M.D., Professor of Medicine in the New York Post-Graduate Medical School and Hospital. Duodecimo, pp. 236. Philadelphia: P. Blakiston's Son & Co. 1904.

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical

School. Volume IV. Gynecology. Edited by E. C. Dudley and William Healy, Chicago. Duodecimo, pp. 216. Chicago: The Year Book Publishers. 1904. (Price, \$1.50; entire series, \$5.50, payable in advance.)

ITEMS.

STATE CIVIL SERVICE EXAMINATION.

Examination for Superintendent, Rome State Custodial Asylum.

An open competitive examination will be held at Albany, Buffalo, New York and Syracuse, June 3, 1904, for the position of superintendent of the Rome State Custodial Asylum. The authorized maximum salary is \$4,000 with maintenance for the superintendent and family. The statute requires that the superintendent "shall be a resident of this state, a well-educated physician and graduate of a legally incorporated medical college," and must "have had a suitable experience and training of not less than three years in the care and treatment of the mentally defective classes, epileptic or insane."

Subjects of examination and relative weights are, laws relating to the institution and the commitment, care and treatment of the dependent and defective classes, 1; institutional care, training and treatment of the custodial class of feeble-minded persons and idiots, 3; institution supervision, administration and discipline, 2; education, experience and personal qualifications, 4.

Persons desiring to enter the examination must execute applications on forms supplied by the commission and file them in its office before noon of June 1. For application blank, address Chief Examiner, State Civil Service Commission, Albany, N. Y.

W. B. SAUNDERS & Co., medical publishers, Philadelphia, invite special attention to a new work, "The vermiform appendix and its diseases," by Howard A. Kelly, M.D., of the Johns Hopkins University, Baltimore, Md. This, they say, will be one of the most magnificent medical books ever published, containing over four hundred superb illustrations, in the preparation of which the artists of the Johns Hopkins University have spent many years.

Another book to which they also call special attention is Dr. Warren Stone Bickham's "Operative surgery," which met with such remarkable success that the large first edition was exhausted in six months. The second edition is just off the press, but as the only changes are the correction of some few typographic errors, it will not be sent out for review.

The JOURNAL presented a comprehensive review of Dr. Bickham's book in its issue for January, 1904, page 419.

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ORIGINAL COMMUNICATIONS.

The Surgical Treatment of "Dyspepsia."¹

By ROSWELL PARK, M. D., LL.D., Buffalo, N. Y.,
Professor of Surgery in the University of Buffalo.

THE terms indigestion and dyspepsia,—like the term rheumatism,—are applied so vaguely and made to cover such a variety of conditions, that I have purposely chosen one of them for a heading for this very reason. We may assume that both are meant to include such symptoms as discomfort after eating, nausea, often actual vomiting, pain—often severe, emaciation, loss of appetite, perhaps change in color of the skin, amounting to more or less jaundice, a host of other and of minor symptoms, plus whatever may be discovered on physical examination, or that of the excreta. For each and all of these there must be a cause. Modern methods of diagnosis have taught us how to recognise and deal with many of them, by means quite outside the pale of surgery, and quite within that of dietetic and medicinal treatment. But modern methods have also done much to reveal how many of the conditions, formerly so vaguely grouped and so empirically treated, are, first, impossible of accurate recognition, or, second, impossible of suitable and successful internal therapy, or, third, accurately recognised only when it is very late, or too often too late to repair damage already done when treated by old conventional methods, so that there has sprung up a general feeling of dissatisfaction therewith, with a growing sentiment in favor of direct exploration, with direct attack if the condition revealed thereby seem to justify it.

The internist—as such—has seen, as it were, one organ after another taken away from him or placed under the joint juris-

1. The annual address in surgery, read before the Wisconsin State Medical Society at Milwaukee, June 23, 1904.

diction of the surgeon, until he may almost well feel that scarcely any part of the human body is sacred to the physician or exempt from the surgeon's attack. It is not strange, then, if some evidences of personal feeling creep now and then into discussion of these matters, nor can tradition and custom be instantly set aside when men try to adjust themselves to new relations.

If then one were to begin by saying that ulcer of the stomach and duodenum, cholelithiasis, appendicitis, pancreatitis, and the like, are essentially surgical conditions, to be dealt with by the surgeon, he would be perpetrating an aphorism which he would find many men loath to adopt; while, if he were to insist that cancer of the stomach is a lesion which should be dealt with by the surgeon often long before it is recognised by the physician, he would certainly shock some morbidly sensitive minds, while announcing a great truth. For I believe that cancer is at first a local disease, and that—as I have often said—there is a period in the history of every cancer when if it could be recognised, and if it were accessible, and if it were thoroughly enough removed, it might be cured. But these "ifs" are of tremendous importance, and stand in the way of success in the majority of cases. But by the time cancer of the stomach is really recognised it is usually too late to do anything more than palliate, even by a skilful surgical operation.

But let us assume the condition, which fortunately generally prevails, that practitioners,—whatever their particular bent or tastes,—are honest and sincere men, anxious first of all for the welfare of their patients, ready and willing to advise that which they deem best, needing only to see clearly that in a given case this method or that gives greater promise of success. If to such an one it can be clearly presented that surgical measures offer better prospect than medicinal, then he needs only to be convinced in order to recommend them. To be sure, and at the present day, such conviction may necessarily include the putting aside of all his old teaching and the relinquishment of much that he has long believed and practised. It may also include such surrender of case and fee as may seriously test his absolute sincerity. With that feature of the problem, however, we are not at present concerned, rather only with its scientific merits.

This much by way of introduction. My work as a surgeon specialist has so often brought me in contact with lesions of the upper abdomen, which have proved to be essentially surgical, but which have for months or years been under medicinal care, or even under little or no care, that I have come to view some of these cases almost with dread, fearing that it be too late, or that a given expedient is now desperate which resorted to earlier

would have been safe. And I dread, too, the imputation which every now and then some guilty practitioner makes to shield himself: "Well, you had an operation; now see the result;" dread it because our ethical observances do not justify one in retorting, "True, but he died because you advised him against it until it was too late." Over the autopsy table there should be no unseemly wrangling, but the lessons there inculcated should never be lost.

Some of the lessons thus learned I beg to discuss with you on this occasion. And for this discussion let it be confined essentially to four of the contents of the upper abdominal cavity—namely, the stomach, the duodenum, the biliary passages and the pancreas, and to only such lesions of these parts as are now thought by the most progressive, but which will in a comparatively short time be acknowledged by all, to be surgical in their nature; *i. e.*, best or only to be treated by operative methods. I shall confine myself to conditions which are more or less associated with those disturbances so often collectively spoken of as "dyspepsia" and "indigestion." (Hence the title of this paper.)

THE STOMACH.

Cardiospasm.—Not long ago Zenker described a condition of apparently spontaneous dilatation of the esophagus, occurring in middle and elderly life, characterised by difficulty in swallowing which appeared to be caused by an associated spasm of the muscle structures of the cardiac end of the stomach. There results from such spasm more or less cardiac obstruction and esophageal expansion, the lower end of the gullet seems to retain a portion of the ingesta which should find prompt entrance into the stomach. This amount may in time equal a half litre, and patients have even died of inanition without minute inquiry into the condition which causes this. It is a lesion which corresponds to pyloric obstruction and must be dealt with after the same mechanical fashion, though, to be sure, plastic operation has there been substituted for the older dilatation by Loreta's method. Such method is still applied at the cardiac end of the stomach, as Mikulicz and others have shown, and a considerable series of cases now brilliantly illustrates the benefits to be obtained in cardiospasm through surgical operation and through it alone.

Pyloric Obstruction.—The question of the possibility of a congenital stenosis of the pyloric is perhaps still under discussion. The best and most recent reports seem to be that such condition is possible, and in 1901 there were some forty examples on record. Regarding the symptoms of this we need not be detained here,

yet they show the possibility of such condition as perhaps explaining intractable vomiting in the very young. Operation has been successfully performed on an infant of eight weeks, and there are several successful reports concerning infants not much older than this. Naturally, the operation of choice in any such case would be a posterior gastroenterostomy. In so young a patient this should be performed entirely by the suture method, and no artificial help (*i. e.*, button) should be employed.

Gastric Ulcer.—This constitutes a very common and unpleasant, often distressing, and sometimes fatal lesion for which medicinal treatment may be justified early but for which, in serious cases, there is no real cure except that afforded by surgery. It is not intended here to study its causes, but a few words explaining the condition itself would not be amiss. These lesions are usually spoken of as simple erosions, acute round ulcer, and chronic ulcer. The erosions have not had their share of popular attention, because they are often so apparently trifling as to be neglected. They may elude what seems to be a careful search during operation and they are likely to be overlooked during the ordinary post-mortem examination. They may be so small as to be barely perceptible and may assume the type of fissure, and yet from so insignificant a lesion most alarming hemorrhages may result. This gives them an importance quite disproportionate to their size, and I am sure it is not generally appreciated what serious results may occur from so apparently trivial a crack in the mucosa. These lesions are most common in the pyloric end of the stomach, for obvious reasons. The acute or subacute round ulcer is more often found in women, while the chronic form with its irregular outlines and thickened edges is more often seen in men.

Three of the significant symptoms of ulcer are pain, vomiting, and hematemesis. The pain is located in the epigastrium and radiates not infrequently toward the back and region of the left shoulder. It is produced by the ingestion of food. Vomiting takes place usually within an hour after food-taking, and by it the stomach contents are usually completely expelled. Bleeding is much more frequent in the acute than in the chronic type of ulcer. In the slow and insidious cases of chronic ulcer pain may not occur until an hour or two after filling the stomach. Vomiting is irregular, often large in quantity, and the vomitus is often of the coffee-ground type, sometimes fetid; this depends to a considerable extent on the amount of dilatation of the stomach and the type of fermentation of its contents. In the slowest cases the symptoms are very irregular. The most chronic cases are more likely to have pyloric obstruction and dilatation.

In nearly all these cases a great amount of tenderness in the

epigastric region and sometimes enlargement and thickening of the pyloric region can be made out, in addition to evidence of dilatation which a careful physical examination will furnish. The pain and tenderness are usually quite well localised, more so than in many other abdominal conditions. An ulcer of the anterior surface of the stomach, near the cardiac end, will cause tenderness along the left costal arch and median line and will be relieved by the horizontal position, while an ulcer of the pyloric end gives tenderness to the right of the median line and the pain is relieved by lying on the left side and increased by lying upon the right. With an ulcer of the posterior wall, the pain is felt in the back and beneath the left shoulder blade. When there are firm adhesions to the liver, the pain radiates under it and in the direction of the right shoulder. When the pain is severe vomiting is rarely absent, and this act usually gives prompt relief. One must not forget that there are also so-called "latent ulcers," which give rise to very few symptoms until something alarming suddenly happens.

While mild cases of suspected gastric ulcer may be amenable to nonoperative treatment a serious and alarming manifestation, such as hemorrhage and intense pain, should be followed by operation at the earliest practical moment. No one can foretell exactly what it will be necessary to do, and so one should be prepared for anything that may be required. The English surgeons, of whom Robson and Moynihan are the most conspicuous in this work, seem to rely almost entirely on gastroenterostomy and do not recommend opening the stomach and searching for the site of the ulcer, but my own experience with this method, though small as compared with theirs, has been so satisfactory that I could not personally advise against an exploration, at least in select cases. The ulcer, if found, may be excised or curetted, and the surrounding area closed with sutures; or there might be found such adhesions to the liver, for instance, as to make it inadvisable to detach these, but make it wise to proceed at once to anastomosis. On the other hand, unless the adhesions are relieved, the patient will not be freed from the radiating pain toward the right shoulder, of which he has probably sorely complained. A reasonable effort, then, should be made to free the pyloric region from anchorage, and if during the process the stomach or duodenum be opened sutures may be used freely and anastomosis be made for protection. With anastomosis performed, as Moynihan has taught us, in an antero-posterior or vertical direction, so that there shall be left no retaining pouch of the stomach, the relief afforded is complete and, as it appears, final.

Pyloroplasty has been almost abandoned by the gentlemen I have quoted above, and yet, here again, I have seen beautiful results which make me loath to entirely give it up.

The simple suture method without complicated instruments and such aid as the metallic button, and the like, are certainly the most adaptable for this purpose. The opening can be made as large as desired, and there is no necrotic process upon which one has to rely for the success of his operative venture. Of course, all that is said here with regard to gastric ulcer is intended to apply more positively to its complex forms, some of which are serious and some of which are promptly fatal unless skilfully operated. I am dealing rather with the general phase of the subject which leads one to say, speaking as a surgeon, that every case so diagnosticated and every case of suspected gastric ulcer would better be operated providing, of course, the patient can be placed in proper hands.

Gastric Dilatation.—Of the extent to which this lesion may go, I do not need remind you. Of course, it is most frequent and excessive in pyloric obstruction or cases of torsion. The greater the amount of dilatation the less hopeful the case from the nonoperative side. Dilatation is to be suspected when there is an increase of thirst with poor appetite and an almost constant feeling of dryness in the throat, when considerable amount of gas is expelled from the stomach, and when these symptoms accompany an almost constant feeling of oppression or soreness in the epigastrium. Vomiting is a feature of the advanced cases and may be a daily or less frequent action, the rejected matter showing evidences of decomposition and free hydrochloric acid. When in such a case, in spite of regular lavage and a properly regulated diet, there is no improvement, then the operation of gastroplication is indicated and will be almost always successful. The process is almost simplicity itself, exposing the patient to very little risk and giving great prospects of relief. It consists in taking a series of tucks in the stomach wall by which its capacity as a retaining bag is very much reduced.

Gastroptosis was first described by Glenard in 1885, and is often called by his name. It may occur along with the displacement of other organs. By virtue of its change of position the stomach may become obstructed at its pyloric end and thus a vicious circuit be established from which there is small relief save by operation. Duret was the first surgeon to suggest this relief, which he afforded by suturing the lesser curvature to the abdominal fascia. A gastroplication might also be easily combined with this gastropexy.

Cancer of the Stomach.—Obviously, if the surgeon be of much use in such case he must deal with primary cancer and with one not too far advanced. The extraordinary infrequency with which cancer transgresses the pyloric boundary of the stomach is fortunate for the surgeon, but a feature which no one yet has been able to explain. Adhesions and lymphatic involvement are present in at least one half of the cases. Probably five-eighths of a large total of cases of gastric cancer will be found to involve the pyloric region, but cancer may be met with at any point of the stomach wall. It affects males more commonly than females and is ordinarily spoken of as a disease of late middle or advanced life, yet it has been observed in an infant of five weeks and operated upon in the twentieth year of life. These cases vary much in their acuity and are often divided into the acute and latent. So rapid may be the course of such a lesion, in rare instances, as to destroy life within three months from the first recognisable symptoms. On the other hand, they may run an exceptionally long and almost latent course like some cases of cancer of the breast.

Inasmuch as cancer is a disease which has no essential symptomatology, so here it is only as one function or another is disturbed by the advance of disease that there arise either symptoms or signs. As a rule, they do not appear until the disease has made considerable encroachment and consist then of vomiting, pain and presence of a tumor. In the presence of these three it is rarely difficult to make a diagnosis, but by the time they are present it is often too late to accomplish much by surgery. The earliest symptoms are vague and misleading, and include what is ordinarily meant in the popular expression "dyspepsia." There is also included a certain amount of discomfort, with occasional nausea and malassimilation of food, which, of course, means loss of strength and body weight. These symptoms will, of course, depend to some extent on the location of the lesion, this being true also of the gastric ulcer; for instance, the formation of hydrochloric acid and pepsin seems to take place rather in the middle zone of the stomach, and the size and location of the cancer may explain the absence or presence of free hydrochloric acid, upon which so much stress is laid, but which at the same time proves so unreliable in recognising the disease. A cancer located near the pylorus will cause obstruction much earlier than one at a distance. Thus it may happen that obstruction symptoms with dilatation form the most pronounced early indication of gastric disorder. Cancer high up near the cardia will produce few early symptoms. By the time it can be positively recognised the patient is too far advanced in the disease

to justify anything more than a palliative operation. According to the degree of dilatation and the movability of the stomach will be the size and location of the tumor when recognised. If adherent to the liver, as it often is, it may be located fairly high up in the abdomen; on the other hand, the stomach may be so stretched out of shape as to carry it below the umbilicus, where it might be mistaken for something else were not lavage or distension intelligently practised. In many respects a dilated and movable stomach may be operated more easily, especially about the pylorus, than a case characterised by firm adhesions, in which case radical operation is rarely of benefit.

After all, the principle matter in these cases is to resort to surgery early rather than late, for which probably we still need a means of early diagnosis which is not yet forthcoming. Almost the best that can be said is that one may suspect the presence of cancer without being able to prove it; and this leads me here to emphasise, and I desire to make the emphasis as strong as possible, that in my opinion a well-founded suspicion of cancer of the stomach, as well as of various other organs, amply justifies an operation intended, first, for its discovery or determination, and, secondly, for its relief. It is hardly worth the time here to go into the chemistry or tests by which this suspicion may be strengthened. I care not by which method the conclusion or the suspicion is arrived at, nor do I care whether the diagnosis wavers as between cancer, ulcer or benign tumor. The rule will apply equally well in the less malignant lesions and happier will the surgeon be in its application.

Ulcer of the Duodenum.—Duodenal ulcer has many characteristics similar to those of gastric ulcer, the pain and tenderness being rather vague, with occasional sharp spasms or stitches upon any sudden action, like turning quickly or sneezing. The hemorrhage from this source may escape either through the stomach and mouth or by the bowels, but in no case is it likely to be so fresh as when it takes place from a gastric ulcer. The pain which follows the ingestion of food will not ensue so early, since it is not produced until the food begins to enter the intestine. Moynihan, in 1901, showed how in 18 cases out of a total of 49 a diagnosis of appendicitis had been made and operation undertaken for that condition. This fact cannot be regarded as entirely due to inattention to the possibility of duodenal ulcer, since the complaint of pain is often vague and its reference to the lower part of the abdomen is quite common. Moynihan has also emphasised what I have myself seen,—namely, that in addition to ulceration of either the stomach or duodenum there occur minute erosions, barely recognisable even on close scrutiny,

which open up bloodvessels, and that there occur so-called "weeping patches" with various other indeterminate conditions.

When a long train of so-called dyspeptic symptoms is followed by exacerbation with sudden access of pain, more or less faintness or collapse, and especially by vomiting of blood or melaena, and when there is tenderness in the region of the upper abdomen, we may well suspect a duodenal ulcer which has given away. In some respects the extent of the perforative lesion is in proportion to the acuity of the symptoms. That perforation does occur more often than is generally suspected is doubtless the case. If it be minute by a localised peritonitis, in some instances a protective wall is quickly formed which prevents the invasion of the general peritoneal cavity, and leads to adhesions which shut off the diseased area, while they at the same time cement the viscera together. Various operators have reported such adhesions which make it apparent that something of this kind had happened. With a diagnosis of perforating ulcer it would be extremely hazardous to postpone exploration in the hope that this might occur.

When actual perforation does occur the symptoms are overwhelming, and sometimes one is confused by their resemblance to those which are common to several of the acute lesions of the upper abdomen. This is not the place to go into a differential diagnosis between perforating ulcer of the stomach, phlegmonous gastritis, perforating ulcer of the duodenum, obstruction by internal hernia, mesenteric thrombosis, volvulus, acute gangrenous pancreatitis and destructive lesions about the biliary passages. All of these conditions have many symptoms in common and in difficult cases without accurate history it is impossible to come to a definite conclusion as between two or three of them. If one takes too long to study and decide such a case, the patient may die before the conclusion is reached. All of these conditions, however, except mesenteric thrombosis, are surgical, and rather than lose time differentiating between them it would be better to call in immediate surgical aid. In this case the physician should rest content, at least at first, with recognising the gravity of the situation, it being no discredit if one cannot quite decide in the presence of such confusing symptoms; on the other hand, it is discreditable if one fail to appreciate the futility of drugs in such instances.

THE GALLBLADDER AND DUCTS.

While the ordinary form of catarrhal obstruction of the ducts is doubtless, as held in time past, most commonly due to trouble spreading upward from the duodenum and of evanescent char-

acter, it must be remembered that extension of trouble from the liver may also produce it, as well as (which is more to our purpose) carcinoma, gallstones, pancreatitis and hydatids. In cancer of the liver, *e. g.*, jaundice is a very variable sign, depending, perhaps, on an associated catarrh, which may be benefited by treatment while the more serious condition goes unrecognised, at least for a time.

Chronic catarrh of the ducts is associated with dyspeptic symptoms in practically all cases, even of gallstone and cancer, and is frequently the active factor in producing jaundice. It may lead to the production of exceedingly tenacious thick mucus which obstructs the passages, and gives rise to much pain in passing the narrowed channel. Indeed, the suffering of actual gallstone colic can be imitated during the escape of this dense vicious material. In such a case either drainage or cholecystectomy would give relief. In fact, it being impossible to differentiate such an attack from a real gallstone case, and the remedy being alike efficacious in both conditions, no hesitation should be felt in urging operation. Mayo Robson advises gentle irrigation with warm water for a fortnight or so after drainage, in order that the ducts may be the better emptied of their accumulations.

Just as we have an obliterative appendicitis so we may have an obliterative cholecystitis, the gallbladder shrinking to a fraction of its former size, perhaps almost disappearing, being often surrounded by adhesions, giving thereby pain which will be radiated often to one side of the chest or to the other, according as the lower aspect of the liver is involved or the pyloric extremity of the stomach. Here, in this shut sac, no matter how imprisoned, as in the closed appendix or any other shut sac, there is constant production and absorption of toxins of some description, as Dieulafoy has shown, and the degree of toxemia thereby produced may be quite disproportionate. Moreover, the irritation is constant and nagging.

The apparent relation between this catarrh and so-called croupous or membranous enteritis was noted in 1820 by Powell, and recently by Jonathan Hutchinson. Mayo Robson inclines to the view that the cause of the painful attacks followed by slight jaundice is the formation of membrane within the biliary passages, which partially obliterates them, and so sets up spasm of the gallbladder. In fact, complete casts of the gallbladder have been thus formed and passed, in several instances (Mayo Robson, *Diseases of the Gallbladder*, 3d. Ed. p. 76). If in such cases error in diagnosis should occur and the gallbladder be exposed without the discovery of gallstones, its removal or

its drainage would nevertheless be indicated and would give relief.

Bacteria may reach the gallbladder by the ducts, the most common route, through the blood, or by direct passage through its walls, the last being exceptional. Colon and typhoid bacilli are the principal intruders, and both are known to be facultative pyogenic organisms, according to the degree of their virulence and the susceptibility of the patient. Mixed infections may here often be found. Alone or in conjunction with calculi they may produce empyema or fulminating gangrene. A local catarrh by itself is not necessarily followed by empyema, but a catarrh plus bacterial invasion will always occasion serious mischief. Here we have loss of appetite, malaise, local soreness, loss of flesh and chills with fever. This condition has too often in times past been regarded as a combination of malaria and indigestion, in spite of the fact that tenderness is always localised, and is an expression of localised peritonitis. There will often be found a thickening or tumor under the tender area.

The dangers of such a case are somewhat proportionate to its intensity, the greatest of them being perforation and sepsis. Rupture and final escape of pus may occur through the diaphragm, into the liver, into any of the hollow viscera or into the peritoneal cavity.

Aspiration for purposes of diagnosis is exceedingly hazardous; a small opening for exploratory purposes, to be enlarged as circumstances may require, is the life-saving procedure in such a case as this.

When Courvoisier first described gangrenous cholecystitis, in 1890, under the term "phlegmonous inflammation," it was supposed to be an exceedingly rare condition, and he could assemble only seven cases. We now know it as a condition quite analogous to acute gangrenous appendicitis, and have learned that under rarely favoring conditions the gallbladder can go to pieces as rapidly and as totally as that other superfluity, the appendix. Such trouble commences usually with violent pain and vomiting, like most of the acute lesions in the regions under consideration; respiration is rapid and thoracic, depression is marked, tympanitis increases, and there are all the indications of local peritonitis. Jaundice may or may not be present, and fever is an unreliable feature. When gangrene occurs it may be due to thrombosis, bacterial invasion or tension.

Given a due appreciation of the nature and gravity of this condition does it need a surgeon to insist upon the necessity for the promptest possible intervention? Granting even the impossibility of accurate diagnosis should it not be everywhere insisted

that such a case is not one for the delay even of an hour's experimentation with drugs? Such a case is essentially one for the surgeon from the hour of the first complaint of pain.

So, too, are even the milder cases of cholangitis, whether it follow chronic pancreatitis, hydatid disease, lumbrici in the ducts, strictures, calculi or malignant disease. These cases are usually characterised by spasmodic pain at intervals, perhaps for years, without jaundice, followed by other spasms, during or after which comes temporary jaundice. Then come attacks of pain followed by chills and perhaps high fever. Tenderness and irregular rigors succeed, and the liver, especially the right lobe, may enlarge, while the gallbladder itself is not usually detected, being often much contracted. The occurrence of chills with slight jaundice and sometimes splenic enlargement will cause this lesion to be frequently mistaken for malaria. The complications most to be dreaded are extension of infection, abscess formation in the liver or gallbladder, involvement of the veins, of the pancreas, or extension of trouble to the thoracic viscera. While the presence of gallstones is the most common cause of suppuration in the ducts, hydatid disease in those parts of the world where it prevails, other parasites, cancer, and the two very common general infections typhoid and influenza, are by no means to be disregarded.

In any condition of this kind, whether acute or chronic, drugs are futile; relief can only be afforded by evacuation and drainage. By this measure septic material is removed, calculi, if present, are taken away, chemosis of mucosa-lined passages is allowed to subside, circulatory equilibrium is restored by relief of pressure, and the kidneys are relieved of the additional burden of excreting biliary material.

Furthermore, and unless conditions are too acute to justify it, adhesions which have both disturbed function and caused referred pains may be separated and general comfort be thus afforded. Perforation of the gallbladder or of the ducts is not so much within the scope of this paper as the conditions which precede and lead to it, but may be mentioned here as one of the dangers to which the physician deliberately exposes a patient when he allows him to go on with vague "dyspeptic" symptoms for which he cannot account.

Intestinal obstruction from gallstones which have escaped is another of these dangers. Acute obstruction from this cause has been considered quite frequent, being placed by Osler as high as one case in thirteen, or by Barnard as one in forty-five cases. Whether such a concretion has gradually made its way along the natural passages, or has produced intense colic and

volvulus, or has taken a short course by ulceration, it certainly is fair to say that in every such instance there must have been such frequent or chronic complaint of symptoms referred to the stomach and upper abdomen as to have amply justified exploration.

Of the cystic distensions of the gallbladder, with or without leading symptoms, there are very many cases. In time past it has been a too frequent custom for physicians to treat patients solely on their own descriptions of their ailments, and therefore many an enlarged gallbladder or other suggestive tumor has passed unrecognised for want of careful physical examination. This reproach on the methods of the past will not much longer be deserved; still it cannot yet be quite omitted.

A distended gallbladder is of itself not so much a disease as an indication of its past or present existence. If it be accompanied by absolutely no symptoms it may be regarded as a menace, but perhaps be allowed to remain under observation, with due caution given to the patient. Else, and with the existence of symptoms, it should be regarded as an indication for operation; as much so as a tender enlargement in the region of the appendix. When existent it can usually be detected, though a great deposit of fat or a very rigid and tender abdomen may cause uncertainty. Rarely I have been in such doubt as between it and a floating kidney or a renal tumor that not until exploration was the matter finally settled. In any such case, however, operation of some kind is equally indicated, even though its exact character is only to be determined at the time. Extreme tenderness is one of the great difficulties in making these examinations, but such tenderness in and of itself amply justifies exploration.

Cancer of these parts may be often suspected, but rarely positively recognised until hopeless. The general remarks made elsewhere in this paper may apply here as well. That if recognised reasonably early and if radically removed, the patient may apparently be cured, is well illustrated by a case of my own, a woman about forty years of age, from Lockport, N. Y., who had been under treatment for indigestion and that sort of thing for a long time. When a tumor was finally discovered, she was sent to me. Exploring I found a very large and thick hour-glass gallbladder, with a large calculus in each compartment. It was bedded in the liver by a zone of tissue which resembled cancerous tissue, and which the microscope later showed to be cancerous. The mass with a goodly portion of apparently normal liver tissue surrounding it was removed, the cautery being used for the purpose. This was nearly four years ago, and the

woman is today apparently well, her only complaint being of a ventral hernia. (The opening was large, the patient being corpulent, and large provision for drainage was made.) Such a case as this would seem to justify my claim that cancer is, at least at first, a local disease.

Another feature of considerable importance in cases of calculous disease is enlargement of the liver, especially of the right lobe. When recognised it may be regarded more seriously than it deserves, or it may be a sign of cancerous invasion. In connection with gallstone disease, and particularly with a contracted gallbladder, my attention was first directed to it by my colleague, Dr. Stockton. In many cases it seems to be an evidence solely of hepatic engorgement and in these it quickly subsides after surgical relief of the obstructing cause.

Naturally, the most common of the conditions now under consideration is cholelithiasis. It is estimated that 5 per cent. of mankind have gallstones, from whose presence they may or may not suffer; in some parts of the world the proportion is much larger. With their origin and physical characteristics we have not here to do. But inasmuch as they figure very largely among the causes of intractable dyspepsias they must interest us greatly. That they may occur at any age is not generally enough appreciated. They have even been noted during the first six months of infancy, and between the twentieth and thirtieth year they are far from uncommon. I have had a number of cases, particularly in young women, during this period. At all periods of life they are certainly more common in females. That gallstones may be present in the gallbladder during a large part of a long life and not be recognised is also true.

That they are in many instances the cause or one of the causes of many cases vaguely termed dyspepsia, indigestion, colic, and the like, is now undoubted by those who are well informed, though sufficient stress is not yet placed upon such undeniable facts as to give them their proper importance.

Irregular attacks of paroxysmal pain, often without apparent provocation, radiating from the right hypochondrium or epigastrium toward the right shoulder blade, accompanied or followed by nausea, vomiting or collapse, and followed or not by jaundice, with or without perceptible tumor in the region of the gallbladder, constitute the classical signs of gallstone colic, to which should usually be added a limited abdominal rigidity. In such cases as these diagnosis is not difficult, and one has simply to resign himself to regard the case as surgical.

But it is in cases when symptoms and signs are not classical that both the conscientious and well informed man may easily

waver as to whether the stomach, the duodenum, the biliary passages or the pancreas is at fault. Is he to continue to waver, or is he to accept the new teaching that the various lesions as between which he is in doubt are all best recognised and best treated by surgical methods, which, begun as explorations, are concluded by whichever of the expedients now known to surgeons may seem best fitted to their nature and needs?

Cholelithiasis is in effect a surgical disease; temporary relief may be in some cases afforded by internal therapeutics, but this prospect is very vague, and concerns mainly the wealthy and the idle, for whom it is too often fallacious.

The frequency with which gallstones are associated with pyloric stenosis or the old lesions of gastric ulcer constitute an additional reason for operative attack. Furthermore, the frequent association of chronic pancreatitis with stone in the common duct, and the notable relief afforded by removal of the calculus, lends another most forcible argument in favor of operative attack.

In the relatively few (14) years that have elapsed since Courvoisier first successfully removed a stone from the common duct, immense strides in technic have been made, and a well-founded suspicion of calculus anywhere along the biliary passages is now not only sufficient excuse but ample reason for its removal. This is justified not alone by the relief afforded, but by the decreasing mortality rate of the best operators, which is today surprisingly small.

Of operative methods I do not propose to speak; rather of general principles. Personally, I have advised complete removal of the gallbladder, in addition to such further work as may be called for, when this can be accomplished without too greatly complicating the case. I have based this on the facts that it is an essentially superfluous organ in man today, whatever it may have been in past ages in man or animals; that like the appendix and other vestigial remains it is prone to go wrong on slight provocation; that when it does go wrong it becomes a source of offense which has little or no excuse for existence, and consequently that its loss entails no sacrifice but often greatest benefit, and can often be effected without perceptibly enhancing risk. But I certainly would not advise or practise its removal in any instance where this would apparently jeopard the result.

THE PANCREAS.

The intimate relations between the head of the pancreas and the second part of the duodenum afford an easy explanation for disease traveling in either direction from one to the other, while

the peculiar relations between the biliary and pancreatic ducts will account for double or even tripartite lesions. Moreover, the pancreas is easily invaded by ulcer or cancer of the stomach, as well as of the duodenum. Were it my purpose to speak of acute diseases of the pancreas I should say more about the anatomical relations of these parts, in order to indicate how pus may burrow, and to show that practically all diseases of this viscus are surgical in the sense that they are amenable only to surgical relief. Doubtless this will sound like a bold statement to men of the old school, but will be challenged only by those who still believe that the pancreas is an organ of almost unknown function and so placed as to make it sacred from the profaning hands of the surgeon. But inasmuch as I am trying hard to confine myself to those disturbances which upset digestion, and only incidentally or occasionally jeopard life, it will not be necessary to go further in this direction.

It is unquestionably true that the common bile duct is often compressed by the head of the pancreas, by which mild but chronic jaundice may be induced. When this yields to medicinal treatment, as it perhaps may in the beginning, well and good; when it becomes chronic there is no relief save by surgery. Pressure on the pancreas and on its duct, conversely, may be produced during the passage of a gallstone down the common duct; by such pressure again there is more or less obstruction within its subsidiary ducts and backing up of pancreatic secretion. This predisposes it to infection, either from the duodenum or from the infected bile passages, and thus a chronic pancreatitis is produced. In either event a vicious circle is established, and a condition set up which is only relieved by affording physiological rest; *i. e.*, by opening and draining the biliary passages, at the same time removing any calculi which may be met with.

But how are such conditions to be recognised and the indication for surgical intervention made clear?

We must first of all remember that the pancreas is so constructed and protected that it is almost exempt from primary disease. On the other hand, it is peculiarly disposed to secondary involvement which is nearly always an infection,—from the liver and the bile ducts as well as from the duodenum by open highways, or at least highways that once were open from the stomach and from the colon and the abdominal lymphatics by contact or proximity. Mayo Robson has emphasised, moreover, that every function of this organ can be vicariously assumed by some other organ save, perhaps, its glycogenic activity. The stomach can take care of the albuminoids, the salivary and intestinal glands of the starches, and fats can be emulsified by bile and intestinal

juices. Furthermore, as in the case of the thyroid, a portion of the organ seems to be as serviceable as the whole, since nearly all of it may be destroyed by necrotic or other morbid process without apparent loss to the patient.

But to return: by what signs and symptoms may we recognise or even suspect pancreatic disease?

Dyspeptic disturbances include anorexia, flatulency (often with offensive eructations), discomfort after eating, nausea, acidity, disrelish for fats and meats. Emaciation is nearly always a feature. The more acute the type of trouble the more marked become the nausea and vomiting. (Of course, in acute pancreatitis "black vomit," *i. e.*, altered blood, is seen earlier than in any other condition). These features should naturally lead to more minute study, not only of the patient, but of the excreta. Naked eye appearances of stools are fallacious. Fat occurs in the stools, as Mayo Robson reminds us (Hunterian Lectures on Diseases of the Pancreas, *London Lancet*, March 19, 1904, *et seq.*) in three forms: as fat droplets, fatty acid crystals and as soap crystals. Moreover, steatorrhea may be met with in jaundice and in enteritis as well; when these coexist there is much fat in the stools. Consequently the presence of fat in the stools is only pathognomonic when the other conditions are not present, unless there is discovered at the same time a peculiar reaction in the urine, to which I shall allude again in a moment. When, however, there are present in a case evidences of steatorrhea with that faulty digestion of albuminous materials, to which is given the name azotorrhea (undigested muscle fibers, and the like, in the stools), and when the urine contains sugar and gives the peculiar pancreatic reaction, and when especially in addition to these signs any enlargement may be detected in the region of the head of the pancreas, then a positive diagnosis can be made of chronic interstitial pancreatitis.

Hypersecretion of saliva has been noted in some cases of pancreatic disease, it being apparently not only a reflex, but a vicarious act. The so-called pancreatic diarrhea is also significant, when present, it being due to want of digestive power and the propulsion forward of bulky and undigested food. Colorless stools without jaundice should always make one suspicious of pancreatic disease, the absence of color being due not to absence of bile but presence of fat. (Walker, Brunton.)

The pancreas is badly placed for furnishing plain physical signs of disease, especially in stout patients. Nevertheless, it is often possible, especially with the patient in or just removed from the hot bath, and with a warm hand, to feel perceptible enlargement. And often when this cannot be accomplished, one can at

least elicit expressions of pain and tenderness which are of themselves significant as indicating something wrong. Further study of such a case will usually indicate that this something would be best more clearly defined and recognised by surgical exploration. In the case of pancreatic calculi tenderness without pain may be elicited.

In the presence of new growths there may be produced on the vena cava such pressure as to cause ascites as well as distension of the gallbladder, or even jaundice by pressure on the hepatic duct. In such cases the mystery can only be solved by exploration. From our point of view, however, no case should be allowed to go on to such an extent without it.

Another feature of interest in some of these cases is tendency to general hemorrhage from all exposed raw or mucous surfaces as well as from vascular ruptures into organs and tissues, particularly into the pancreas itself (pancreatic apoplexy). Of course, this is due to alterations in the blood, not yet sufficiently studied, but certainly in part characterised by diminution in the number of blood plates and by enfeebled coagulability. In this condition, particularly emphasised by him, Mayo Robson's advice to give large doses of calcium chloride (30 to 60 grains) three or four times daily, should be followed, since this salt has a marked effect in increasing coagulability.

So much has been already said about jaundice as an indication for operation in all chronic and many acute cases that it is hardly necessary here to point out its significance when pancreatic disease is suspected. Glycosuria is a matter of even greater importance. When present it is to be interpreted as meaning that the islands of Langerhans are involved, *i. e.*, that the pancreatic lesion is of interstitial and interacinous type; whereas in disease of rather the interlobular type these islands are not encroached upon, at least not until late, and so they escape. Glycosuria, then, is significant when detected, but its absence gives only negative value to the test. So too in cancer, when only a part of the pancreas is involved it will be absent.

Much is to be hoped for from a new reaction which Mr. Cammidge has but recently described (*The Chemistry of the Urine in Diseases of the Pancreas, London Lancet*, March 19, 1904,) but has been putting to practical test for some years, and in which our best authority, Mayo Robson, seems now to have quite implicit confidence. By means of this he seems to be able to determine as between malignant and nonmalignant pancreatic disease, and thereby to have greatly assisted the surgeon, since many conditions suspected to be cancerous can thereby be shown to be nonmalignant, and the surgeon's sphere of usefulness

thereby enlarged. This test is too complicated to be here described, but my personal acquaintance with and confidence in both Mr. Mayo Robson and Mr. Cammidge, incline me to feel that they have largely added to our resources by its introduction.

Of pancreatic cancer, cysts and calculi, I hardly need speak here in detail. Whether certainly recognised or sincerely suspected they should alike be given the chance which only the surgeon's knife affords.

But it is right to stop and answer the question surely prompted by the above statements. What can surgery offer in these rather numerous cases of chronic pancreatitis and allied conditions?

First of all, exact diagnosis, and this will of itself afford great comfort though the condition revealed be inoperable.

Next, direct access can be made to not only the biliary passages, but to the head of the pancreas and its ducts, if necessary, by opening the duodenum and directly exploring the duct of Wirsung, or for the removal of calculi. In the majority of cases, however, it will be found necessary and at the same time sufficient to open and drain the common duct, of course removing any calculi that may be discovered, and not resting until a probe has been passed completely through it and its patulency reestablished and demonstrated. In a goodly proportion of cases it will prove sufficient to do a cholecystotomy by which there shall be afforded opportunity for drainage and antiseptic irrigation. At other times a cholecystoduodenostomy will be indicated, by which bile may be more easily poured into the bowel. Behind all these procedures there are the underlying motives of affording not only direct outpour of obstructed secretions, but physiological rest. After their performance appetite returns, digestion is resumed, body weight increases, jaundice disappears, pain and tenderness subside, cachexia disappears, and for a condition of general ill-health is substituted one of vigor and general welfare which no amount of drugs or time spent in dietetic "cures" could accomplish. True, this is effected at the expense of operation with its attendant dangers. In the hands of our best surgeons these risks are now so small that they should cut no very large figure in deciding as to the best course; nevertheless, they can never be left out of account.

In conclusion I would summarise thus: operation is indicated in:

Gastric ulcer.—Either gastrotomy with direct attack upon the involved surface, or gastroenterostomy (posterior), to afford rest and a more direct outlet.

Gastric dilatation.—When lavage and the customary internal measures have proved disappointing, and always when pylorostenosis exists.

Gastric cancer.—Early if possible, hoping to effect a cure; when late it may be still possible to make a gastroenterostomy which shall prolong life. In the most advanced cases, one may have to be content with a jejunostomy for temporary purposes.

Gastric anomalies.—Such as hour glass stomach, and the like.

Pyloric obstruction.—Here one must choose as between excision with end to end reunion, pyloroplasty, or anastomosis, preferably posterior.

Duodenal ulcer.—Here a posterior gastroenterostomy is clearly indicated.

Duodenal cancer and duodenal stricture.—Of these also the same is true.

Biliary obstruction.—All chronic and many acute cases, whether due to intrinsic or extrinsic causes (cholangitis, gallstones, cancer, old adhesions.) In these some operative intervention is imperative; whether it shall consist of extirpation, opening and drainage, or anastomosis, depending on the conditions revealed through the exploratory incision.

Pancreatic disease of almost every type, whether acute or chronic. In the former, posterior drainage must usually be added to the attack from the front. In the latter, it will usually suffice to open and drain the biliary passages; rarely a cholecystenterostomy may be called for.

Finally, in all cases of acute pain in the upper abdomen accompanied or followed by vomiting, especially of recent or old blood, by tympanitis, muscle spasm and collapse, and in all chronic cases of pain and tenderness in the region described, with a history of recent and particularly of long standing symptoms, of emaciation, dyspepsia and indigestion, with or without perceptible tumor, but with rigidity of the rectus and other abdominal muscles,—in all of these, I say, I would urge surgical exploration, after due preparation, and under circumstances which may allow the surgeon to resort to every technical and life-saving expedient known to the art. This advice is given as the result of convictions that steadily strengthen as experience accumulates and with a sincere belief that when it becomes general routine, as it is sure to in time, the greatest good will be done to the greatest number.

The Present Status of Vaccination.¹

By HAMILTON D. WEY, M. D., Elmira, N. Y.,

President of the Medical Society of the State of New York.

PLAGUE, pestilence and famine follow in the wake of war; the latter usually immediate and confined to regions contiguous to scenes of conflict, while the two former not infrequently manifest themselves remotely in distant lands and across intervening seas. Following the civil war as troops returned from the front to again engage in the pursuits of private life, smallpox and typhoid fever appeared in communities previously exempt. The same was repeated at the close of the Hispano-American war and upon the return of soldiery from the Philippine Islands. Experience gained during the Civil war conferred upon the practitioner of that period diagnostic acumen in the recognition of variolous disease and skill in its treatment. Knowledge thus obtained was secondarily exercised in civil life with communal benefit and advantage. Certain communities appreciative of preventive medicine exacted a vaccination qualification for participation in school privileges before vaccination was accorded recognition in the statutes of the state, in or about the year —. Early in the seventies the city of Elmira rigorously required successful vaccination before according admission to the public schools.

Following the declaration of war against Spain and conditions inseparable from and incident to the time, as the massing of large numbers of men collected from all quarters of the country, the establishment of camps, and contact beyond the normal with peoples of tropical countries whose customs, mode of living and traditions differ from our own, variolous disease appeared synchronously in many states. For a third of a century smallpox in the populous portion of the country was a disease of rarity. Sporadic cases carried consternation and apprehension to the communities in which they appeared. During the period intervening between the Civil and Hispano-American wars a generation of physicians had entered upon the practice of their profession, a large majority of whom had never seen a case of smallpox,—to say nothing of never having treated the disease,—who were unfamiliar with it from a clinical standpoint, and whose only knowledge was obtained from cursory reading and a mental picture derived from unsatisfactory and inaccurate prints and illustrations. To these conditions pertaining to the profession may reasonably be ascribed many errors of diagnosis and the injecting into the nomenclature of disease such unscientific and meaningless terms

1. Presidential address delivered at the 68th annual meeting of the Medical Society of the County of Chemung, May 17, 1904.

as Cuban, Spanish, and elephant itch, to say nothing of localisms, and the discrediting of *impetigo contagiosa* as a morbid entity.

The aftermath of the Spanish war, and the tour of the Joshua Simpkins troupe that terminated ignominiously upon boat quarantine at Geneva, are responsible for the prevalence of smallpox in 1898 and continuing to the present time, extending over an area comprising the central, western and a portion of the southern tier counties of the state, as well as points along the Hudson river and in the Adirondack region. The rôle of war as a disseminator of pestilential disease in civil life has been referred to and mention made of professional shortcomings in diagnosis. In the latter must be included reluctance to diagnosticate smallpox or varioloid.

Uncertain of the correctness of diagnosis in suspected cases it has more than once occurred that physicians were loath to and deferred making a diagnosis repugnant to the patient and his family, on account of the disease itself and the distastefulness of the isolation of quarantine, and unwelcome to the immediate community, the accuracy of which might be questioned subsequently by public opinion or in a court of justice. Thus the true nature of mild cases of eruptive disease has been overlooked until such time as a severe case of smallpox with unmistakable phenomena of the disease declared the true nature of antecedent cases.

There is another reason for the prevalence of smallpox during the past six years. My own opinion is that years ago, so far at least as concerns those of school age, greater protection existed through vaccination than at the present time. Generally speaking, this is particularly true of rural districts. In the days immediately following mandatory vaccination, compliance with the law was more general and unquestioned than now. School boards and directors had regard for the statute and children, as a rule, presented evidence of protection against variolous disease. But time brought a blunting of perception and a gradual growing disregard of preventive medicine, until it came to pass in many sections the law was indifferently enforced and weak-heartedly observed.

My own observation, acquired in an official capacity, is that native born children from adjacent country and a neighboring state are generally unprotected as against smallpox. Then, too, there have arisen Philistines in and out of the profession and certain pseudo medical journals inveighing against vaccination. These have a following who have accepted the intemperate arguments advanced and denunciations uttered as founded upon fact and unanswerable. Their teachings and utterances are in opposition to prophylaxis and treatment of disease by animal deriva-

tives. Agnosticism is by no means confined to matters religious.

It is not necessary in this connection to refer to the objections urged against vaccination because of the alleged production of septicemia, tetanus and the transmission of bovine disease. It is conceded vaccination in all its phases, the initial inoculation and subsequent treatment of the lesion, require as great a degree of attention to details and the principles of asepsis as any surgical undertaking. The use of shields continued after the first twenty-four hours is a crime and cannot be too strongly condemned. Except as above stated they become a vehicle of infection and responsible for sloughing, excessive loss of tissue and septicemia.—conditions that justly discredit and are a reproach to the procedure under discussion. Vaccinal neglect, either by the subject himself or those having him in charge, may lead to untoward results. It was conclusively proved two years ago at Camden, N. J., that the outbreak of tetanus was not due to virus employed but to neglected arms and infection due to contact with dirty hands and finger nails, in a section where tetanus not infrequently appears.

In a measure the country was in a state of preparedness for the smallpox invasion of 1898. Long years of exemption from other than sporadic cases, few and far between, served in a degree to efface the lessons of former years of the beneficence of vaccination. When smallpox finally appeared there was abundance of material susceptible to the disease. The fact that in the recent past smallpox has generally prevailed in a mild form, the number infected being disproportionate to the total number of exposures, does not militate against the statement just made. It is a fact noted in connection with contagious disease, that epidemics occur characterised by a repetition of cases of mild type and feeble power of communication. What causes the materies morbi of infection to repeat itself in malignant form or feeble and benign manner is for others to say. It seems to me it must be evident to those not blindly prejudiced that several states received their just desserts according to the degree they ignored the law and means of prevention.

In this state there is no foundation in law for compulsory vaccination. To subject an individual or child to vaccination against his will and without the consent of parent or guardian constitutes an assault. Health officers and school authorities cannot summarily vaccinate without rendering themselves liable. In the matter of *Smith*, a Brooklyn case, 146 N. Y., 68, the Court of Appeals decided that no citizen can be compelled to be vaccinated against his will. To do so by force would be an assault. Nor

can a person be quarantined simply for refusing to be vaccinated. In the case above referred to, one Smith lived in an infected district and was engaged in the local truck and express business. He refused to be vaccinated and was quarantined by the health officials. This was held illegal, the court deciding the only grounds for quarantine were an actual infection with the disease or an actual exposure to it. The mere possibility of exposure does not justify a quarantine.

Section 200, Article XII., Chapter 661 of the Laws of 1893, commonly spoken of as the public health law, provides: "No child or person not vaccinated shall be admitted or received into any of the public schools of the state, and the trustees or other officers having the charge, management or control of such school shall cause this provision of law to be enforced." The law provides for the adoption of a resolution excluding unvaccinated children and persons from school until vaccinated, and the posting of the resolution in at least two public and conspicuous places within the school district. Provision is also made for vaccination at public expense of any child or person of suitable age desirous of attending school, whose parents or guardian are unable to procure vaccination for them. There is no ambiguity of expression as to the intent of the law—namely, that no unvaccinated child or person shall be received or admitted into any public school of the state. The constitutionality of the law has been attacked, but the courts have upheld the law and declared in effect that while the constitution of the state imposes upon the legislature "the maintenance and support of a system of free common schools, wherein all the children of the state may be educated," such common school system is not to be regarded as a constitutional right, but simply a privilege.

The reference in the constitution to the public school system is for the purpose of safeguarding and continuing an existing privilege. The public school system being then a privilege, it is competent for the legislature to impose a qualification for participation in such privileges as shall operate equally and without distinction upon all who are, or may desire to become, pupils in the public schools. Such qualification is vaccination applicable to and affording protection to all pupils. The law states that children under a certain age shall attend school; otherwise they render themselves amenable to the provisions of the truant law. The question suggests itself, what disposition shall be made of children becoming truants through the act of parents or guardians in refusing vaccination, either by reason of prejudice or upon the ground of conscientious scruples? To my knowledge this matter has not been passed upon by the courts.

Edmund C. Viemeister, of the Borough of Brooklyn, sought to compel the principal of Public School No. 12 to admit his child to the school, admission having been denied on account of the child not having been vaccinated. It was urged in behalf of Viemeister that the statute enforcing the vaccination of public school children was void, being contrary to the provision of the constitution. Under date of November 20, 1903, the Appellate Division of the Supreme Court for the second department, sitting in Brooklyn, upheld the constitutionality of the statute. The prevailing opinion by Mr. Justice Woodward is substantially as follows: Section 1 of Article IX. of the Constitution of the State of New York, which says: "The legislature shall provide for the maintenance and support of a system of free schools wherein all the children of the state shall be educated" did not operate to make education a constitutional right rather than a privilege, and it was intended merely to secure a continuance and an extension of an existing privilege. The legislature has the right to impose any reasonable regulations upon the exercise of this privilege, provided that such regulation operates equally upon all persons in the same class and under the same conditions, and Section 22 of the Public Health Law (Laws of 1893, Chapter 661,) which prohibits children from attending the public schools without first having been vaccinated, is a legitimate exercise of this power of regulation, and is constitutional. Such section does not violate the constitutional provision that no citizen shall be deprived of any of his rights and privileges "unless by the law of the land or the judgment of his peers." An appeal was taken from this order of the Supreme Court, made at the Kings County Special Term and entered in the office of the clerk of the County of Kings on the 14th day of July, 1902, denying the petitioner's motion for a peremptory writ of mandamus. Justice Herschberg also wrote an opinion sustaining the statute, declaring it constituted a legitimate exercise of the police power of the state.

Instances were not lacking this past winter of rural school boards deliberately refusing to enforce the law relating to vaccination. Nor does it appear that peremptory closing of public schools in certain sections quickened obtunded faculties and blunted sense of duty. "No child or person not vaccinated shall be admitted or received into any of the public schools of the state." The law notes no exception and excuses none from its specific provision. There has, however, come into practice the exercise of arbitrary discretion on the part of school authorities in consideration of the alleged ill health of a child, inability to withstand the shock of a minor surgical procedure, and preëxisting cutaneous lesion that might possibly be aggravated by vaccination, and

claimed immunity to vaccine virus demonstrated by one or more previous futile attempts. Usually, there is little or no justification—more frequently none than any,—and that but slight, for such attempts and subterfuges to evade the law. The assumption of such discretion is illegal, unwarranted and unjustified. From a medical point of view a child has either been vaccinated or it has not. If the former, it is eligible to the public schools in conformity with the public health law. In the latter case it follows that, through intent or by reason of imperfectly demonstrated non-susceptibility, the child has never experienced the lesion and phenomena following successful inoculation with the virus of cowpox or so called humanised vaccine. One, two, three or more attempts unsuccessfully performed do not constitute a vaccination or indicate immunity to either or both vaccinia and smallpox. Unsuccessful attempts may constitute vaccination from the pedagogic point of view, especially when a large enrollment of scholars is desired; but from a medical and clinical standpoint, never.

I am compelled, however, in justice to school authorities to say that they are justified by legal opinion in the course occasionally taken. The view expressed by the Attorney General upon this point is simply an opinion, not a decision of the court; and not being a decision by the court cannot be regarded as a final and conclusive interpretation of the statute. Under date of February 18, 1904, I wrote the State Commissioner of Health as follows: "Can you refer me to any decision, or officially inform me what constitutes a vaccination? Does vaccination imply: (1) a successful effort from a clinical point of view? (2) do a number of attempts (3 or 4), upon the same individual, all unsuccessful, constitute a legal vaccination and permit of the attendance of such a one upon the public schools?" The questions raised were submitted to the Attorney General who replied February 24, as follows: "The object of vaccination is the prevention of smallpox. The method employed is inoculation with the virus of cowpox. It is the common experience of mankind that cases are of frequent occurrence in which the act of inoculation is not followed by swelling, soreness and inflammation, which are the natural and generally expected results of vaccination. In such cases there is a strong probability that the particular subject is immune, either as the result of a former vaccination or for some other cause perhaps not clearly understood. In my judgment the vaccination called for by the statute is accomplished when the patient has been inoculated with the virus of the cowpox."

Until such time as the courts shall have passed upon the question under immediate consideration I presume school authorities, at least those mindful of the provisions of the public health law,

will govern themselves according to law. But it is incumbent upon them to proceed slowly and cautiously in accordance with the advice given by the state's legal adviser. The opinion given may pass as legal advice, but I feel I am warranted in saying there is not a physician of standing and experience in Chemung County but will dissent from the utterances and conclusions of the Attorney General. They are based upon misunderstanding and false premises, are erroneous and constitute a menace to public health. Such an opinion from other than the Attorney General of the state of New York would command a smile or a look of compassion from any one of you. Those of us who are engaged in public health service, interested in the administration of health laws, and with the best interests of the public schools at heart, are disappointed that such an opinion should have been received from such a source and made public. It is a blow to preventive medicine and paves the way for artifice (nitric acid traumatism), fraud and false representation. Physicians are not wholly blameless in conveying the impression a child is immune to vaccination. Two or three ineffectual attempts, possibly faulty technic, unreliable virus, a weak yielding to the importunities of parents, and a child is declared insusceptible to vaccination—and a certificate accordingly given. One, two or three attempts do not demonstrate vaccinal immunity. Error may lie with the operator; the virus employed may be inert. It is safer to err in the opposite extreme than exhibit undue haste in certifying for the purpose of obtaining admission to the public school a child cannot be successfully vaccinated. Recently I successfully vaccinated a child upon whom the operation had previously been twice performed and admitted to school upon such representation. In another instance two years and frequent attempts, six or seven, were required before the child conformed to school requirements. This phase of my topic has been rendered perplexing to the physician by reason of the unsatisfactory, worthless and inert virus upon the market for some time past. For two or more years, so-called vaccine virus has proved a disappointing agent in my hands. I speak impartially and without prejudice for I have used all forms of the commercial article sold in this city. The physician who is able to attain 98 per cent. success in primary cases with commercial virus, such as we have had for two years is a genius, and it would afford me pleasure to look upon his countenance. Such results are exploited and referred to as demonstrating the superiority of this virus or that. With virus thus advertised I have never been able to more than reach the outer limit of the shadow of such success. Within a short time the agent of a supply house confessed to me the vaccine product of his firm had proved unstable and deficient in results.

He could assign no cause, but derived the comfort due him from the consciousness his competitors fared no better. Whether cow-pox has largely lost its former specific property through continued cultivation and transmission, and further modified by methods of preparation for the market, are laboratory propositions. I cannot regard it as altogether a happy and fortuitous day when bovine superceded humanised virus. There is much to commend the former—you are as well aware of this as I. But I am of the opinion, and believe the older practitioners will sustain me in it, that accidents of sepsis, from conditions inherent in the virus and communicated disease in former days were of no greater frequency when humanised virus was generally employed than in these latter times when bovine virus has attained the position of a fetich. The times change and we change with them; but it does not follow that viewed in the light of today the past was altogether an error.

We have convened today in observance of the sixty-eighth annual meeting of the Medical Society of the County of Chemung. We have not been called upon the past year to record the passing of any members, nor have matters medical of unusual importance relating to administrative questions presented themselves for consideration. The year has been uneventful and harmonious. I desire to express my obligations to those who through their coöperation and presentation of papers of value have conferred interest upon our meetings. Whatever the measure of success attained, has been due to their efforts, and I here record my appreciation. In every instance my requests have met with hearty and cheerful compliance.

I hoped to be able to announce at this meeting the union of the two state medical organisations and a united profession. But matters that seemed of sufficient importance to the joint committee charged with preliminary details have delayed final action. It is confidently believed that before we meet again consolidation of the societies will be an accomplished fact, past differences reconciled, and the profession united upon a sound and substantial basis.

359 MAIN STREET.

RHEUMATIC DYSMENORRHEA.

R	Tr. Cimicifugæ.....	℞ii.
	Tr. Stramonii	℞ss.
	Tongaline	℞iv.

M. Sig.—A teaspoonful in water at meal times.

Accurate Determination of Blood Pressure as an Aid to Diagnosis.¹

By W. H. GLENNY, M. D., Buffalo, N. Y.,

Assistant Attending Physician at the Buffalo General Hospital.

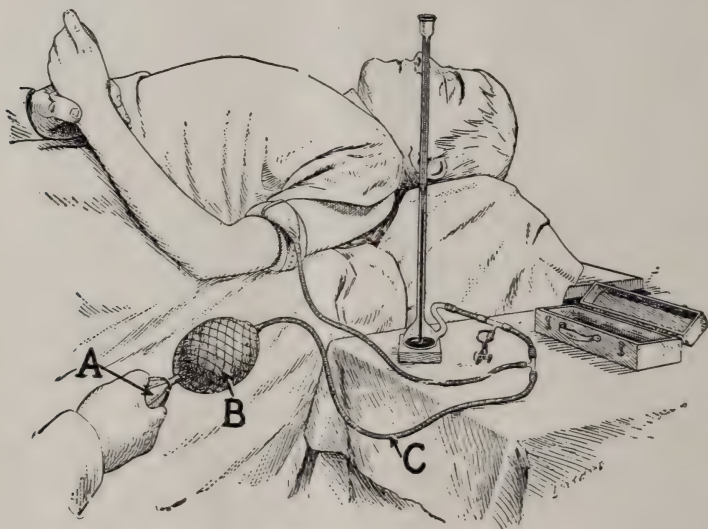
ESTIMATIONS of blood pressure were undoubtedly made by Hippocrates who probably used the fingers to obliterate the pulse. This is an excellent method and is of great value in the hands of a practised observer, but we now have much more accurate means of making such a determination. The first recorded pressure in man was reported by Vierordt in 1855. Suffice it to say, however, that his methods were not accurate. In 1876, Von Basch used a bag of fluid to occlude the artery, noting the pressure in the bag when the pulse beyond was obliterated. He selected a spot on the artery overlying bone and applied his force downward. This gave him the maximum or systolic pressure, but as his force was sometimes applied at a tangent his results were not always uniform. In 1896, Riva Rocci applied pressure by means of an air-containing circular armlet, thus avoiding one of the chief errors of Von Basch, since his force was always applied at right angle. At the same time the use of a large artery—the brachial—gave a better estimation of central pressure.

The Gärtner tonometer is based on the same principle, *i. e.*, occlusion of the artery. It is small and portable and much in vogue in Germany at the present time. Its mode of application is briefly as follows: the finger is blanched by means of a rubber band and the pressure is then removed, except between the first and second joints, the finger remaining bloodless. The pressure about the base of the finger is then lessened until flushing under the nail shows that the lumen of the artery is open. This records approximately the maximum pressure, but is open to objections. First, in order to make a second reading for verification the whole procedure must be repeated. Second, the arteries of the finger are subject to considerable vasomotor variation, and a high initial pressure to blanch the finger will give a lower reading than when an initial pressure of moderate degree is used.

My instrument is a slightly modified Riva Rocci sphygmomanometer made by Messrs. Eimer and Amend, of New York, who have followed suggestions of Cooke, of Baltimore, and made

1. Read at the 68th annual meeting of the Medical Society of the County of Chemung, at Elmira, May 17, 1904.

an article at once portable, easy of adjustment, and sufficiently accurate for clinical purposes. It is applied about the arm above the condyles and preferably below the biceps. Pressure is then applied by means of the bulb (*a*), until the radial pulse is obliterated, when the height of the column of mercury is noted. The mercury is then allowed to fall until the pulse is again palpable, and the mean between these two readings is taken as the estimate of the systolic blood pressure. The points at which the pulse is obliterated, and at which it is again felt, differ from each other only by a few m.m. and can be verified any number of times by



GLENNY: SPHYGMOMANOMETER ADJUSTED TO PATIENT.

squeezing or relaxing the reservoir bag (*b*). The whole process requires but a moment.

The diastolic or minimum pressure can be estimated in a different way. The walls of an artery make their greatest pulse wave excursion when the pressure of the tissues about the artery is equal to the pressure of the blood within, at a time when the arterial wall itself is under least tension. This time is of course at the end of diastoly, and this fact has been proven correct in numerous laboratory experiments by various observers. A device known as the Hill and Barnard sphygmometer makes use of this principle for estimating the diastolic pressure. An air-containing armlet, similar to the Riva Rocci, is connected by rigid tubing to a manometer which magnifies the pulse waves. As the pressure is increased within the armlet and tubes, the needle of the manom-

eter begins to oscillate and the oscillations grow larger up to a certain point, when they again diminish in size and finally cease. The pressure at the time at which the greatest oscillation occurs is the diastolic blood pressure. A priori, one might suppose that the point at which oscillations cease would be the systolic pressure, but this is not the case, as the pulse beyond the constricted part of the artery is obliterated by a pressure considerably less than that at which oscillations of the manometer cease.

Stanton, of Philadelphia, has devised an instrument based on both of the above principles and with it measures both the systolic and diastolic pressure from which the mean pressure is easily estimated. His instrument is like the Riva Rocci, except that the armlet is wider and the tubing is composed of rigid instead of flexible rubber. This rigid tubing imparts oscillations to the column of mercury in the manometer and the pressure at which these are greatest is noted as the diastolic pressure. When the pulse in the artery beyond the point of compression is shut off the pressure is noted as the systolic pressure. The mean between these two readings being the mean blood pressure. This instrument is made by the Arthur H. Thomas Company, of Philadelphia.

I find that my instrument, as shown in the cut, gives a reading of from 10 to 50 m.m. higher in a person with a fat arm than the same instrument with an armlet twice as wide. But the makers supply only the narrow armlet. This apparatus gives the maximum or systolic pressure, which for practical clinical purposes is all that is required. Howell and Brush have shown by a large number of experiments on animals in the pathological laboratory of the Johns Hopkins Hospital that the general trend of arterial tension is the same for either systolic, diastolic or mean pressure, except in hemorrhage, where there is probably more variation in the systolic than in the diastolic and hence than in the mean pressures.

In man with any of the above described instruments blood pressure varies with age and with the condition of the arteries. In general it may be said that in children blood pressure is much more uniform than in adults. Up to the age of two, a pressure of from 70 to 90 m.m. of mercury may be considered normal, and in children, 110. In adults where the arteries are soft and no diseased condition exists a pressure of 130 to 140 is about the average. Women have a pressure of perhaps 10 m.m. less than men, and a person resting in bed has about 10 m.m. less than when sitting or standing. Excitement or any stimulation, the inhalation of tobacco smoke or pinching the skin may raise arterial tension as much as 40 m.m. Therefore, in making

an estimation outside influences must always be considered and avoided when possible. Arteriosclerosis plays an important rôle in blood tension estimation; the greater the sclerosis, the higher the tension estimation, probably because of the inelasticity of the artery walls. These general facts must be borne in mind when using such an instrument for purposes of diagnosis.

I want to call your attention to three diseases or conditions in which blood pressure observations, taken by means of one of the above described instruments are of value. I refer to uremia, intracranial hemorrhage and typhoid fever with its complications. No one now thinks that it is sufficient to note that a patient has a fever, but the degree of temperature is always taken with a thermometer and stated in terms of a known standard. Why, then, should we be satisfied with noting that the pulse tension is high when an accurate and definite statement can be made regarding it? In uremia, pulse tension is always high and in a doubtful case seen for the first time in a comatose condition the tension of the pulse is recognised as an important factor. The course of the disease can usually be foretold with considerable accuracy and when the tension falls in a case of uremia which is still showing such grave symptoms as headache, nausea or convulsions a favorable prognosis may be made, although all other clinical symptoms remain unchanged. And this lowering of pulse tension may be quite imperceptible to the unaided finger of even the most skilled observer. In like manner therapeutic measures may be commenced before such active signals as convulsions have manifested themselves and the severity of the attack undoubtedly shortened by beginning treatment earlier than otherwise would be possible. These facts apply as well in puerperal eclampsia as in uremia.

Intracranial hemorrhage.—The brain is the only organ of the body which has not its own vasomotor mechanism. It is believed that when the brain needs more blood the vessels of the body are constricted through the central nervous system, thus sending more blood to the brain as less is allowed to pass through the general systemic circulation. After an intracranial hemorrhage the brain becomes anemic from pressure of the clot and the vasomotor centers contract the arteries of the body in an endeavor to send more blood to the brain. The pulse tension becomes high and again, as in uremia, an accurate estimation of this is of value. In this case in deciding whether or not trephining is necessary. Another point to be taken into consideration as an indication of intracranial hemorrhage is a pressure which shows from moment to moment great alterations in level. A case in point being one operated upon by Dr. Finney, of Baltimore.

A young man received a blow on the head and, as I recall the case, there was no indication other than the history; the fact that the patient on the second day complained of more headache than on the first, and that the blood pressure showed great variation, changing in a moment over level of 30 or 40 m.m., but at no time remaining uniformly high. Dr. Finney operated and removed a small extradural clot, the patient making a good recovery.

I feel some hesitancy about mentioning this case, as I report it entirely from memory and the operation took place two years ago, but I wish to bring out the importance of oscillation in blood pressure. Dr. Harvey Cushing, of Baltimore, who was one of the pioneers in the use of blood pressure estimations, in speaking of their value in cranial trauma says: "In conjunction with other symptoms a progressive increase in arterial pressure or a high degree of the same which has been already reached or a pressure which exhibits from moment to moment great alterations in level may be taken as a certain indication of the advisability of early operative intervention."

Typhoid fever.—The blood pressure in typhoid fever is uniformly low except in complications. In 115 cases which Geo. W. Crile, of Cleveland, reports, the highest pressure noted of any uncomplicated case was 138 m.m.,—the lowest, 74 m.m. The average pressure for first week, 115 m.m.; second week, 106 m.m.; third week, 102 m.m.; fourth week, 96 m.m.; fifth week, 98 m.m. This low tension is evident in the dicrotic pulse, so commonly seen in typhoid. If in a patient suspected of having typhoid fever, with soft arteries and no kidney complications, we find a blood pressure of 140 m.m. of mercury, it is very strong evidence that the patient is not suffering from that disease—and such an accurate estimate cannot be made with the unaided finger. The pressure is remarkably uniform in typhoid and a sudden fall of 20 to 30 m.m. in a patient under constant observation may be taken as a strong indication of hemorrhage and steps taken accordingly. Its value here, however, is not as great as in perforation where a correct diagnosis and a prompt operation often means life to a patient who would otherwise have a surely fatal termination of his illness. In peritonitis the blood pressure is always high except just before death, or after great shock. In a series of twenty cases reported by Dr. Crile, made with the same instrument and by the same observer as the typhoid series just mentioned, the highest pressure was 208, the lowest 156 m.m.,—the average of all the cases being 166 m.m. Whereas the average of the typhoid cases was 104 m.m. Among these twenty cases, there were five typhoid

perforations, the blood pressure before and after perforation being as follows:

Before	84	116	116	—	—
After	110	180	165	165	208

All of these figures are reported by Dr. Crile in the *Journal of the American Medical Association*, May 9, 1903. For more than a year I have been estimating with the Riva Rocci instrument the blood pressure of nearly all typhoid patients in the wards of the Buffalo General Hospital and can corroborate Dr. Crile's figures. The highest pressure of uncomplicated cases with soft arteries, coming under my notice, has been 132 m.m.

Dr. J. B. Briggs reported in the *Boston Medical and Surgical Journal*, September 24, 1903, two cases from the wards of the Johns Hopkins Hospital which are such striking illustrations of the value of blood pressure estimations in typhoid perforation that I will give them in some detail, as the second one came under my own observation:

Case I.—A young man entered the hospital in the third week of an attack of typhoid. On entrance he was very toxic though not in stupor. Blood pressure for ten days after entrance ranged from 98 to 110. At eight o'clock on the night in which perforation occurred, his blood pressure was 104; at midnight it was 144. At that time he complained of no pain and his abdomen was everywhere soft and natural, deep pressure causing no distress. His leukocyte count below 6,000. At 4 a. m., when being taken from a tub, he gave a cry of pain, the pain being located below the umbilicus. When seen at that time his knees were drawn up and there was extreme tenderness in the right iliac fossa, rigid lower right rectus, and a suggestion of muscle spasm. Blood pressure 150, leukocytes still below 6,000.

He was operated upon at 8 a. m. There were two perforations with rapidly spreading peritonitis which the surgeons estimated to have been present eight or ten hours, certainly more than four hours, which was the time which had elapsed since the first sudden starting of pain. It was suggested that in this case perforation had occurred before twelve o'clock, the time at which the high arterial tension was first noted, but that it had been confined within coils of the intestine touching only the visceral peritoneum and that not until four o'clock, the time of the pain, did the peritonitis spread to the parietal walls.

Case II.—That of a woman who had been in the hospital fifty-seven days. She had had two relapses and five hemorrhages, but no complications for three weeks prior to the date of operation. She had marked toxemia, slight delirium, and slight abdominal pain, never well localised, for several weeks. The leukocyte counts had remained constantly low, the abdomen

was somewhat full; but there was no tympanites until three days before operation, when this developed with slightly increased tenderness of the abdomen, never localised. Liver dulness was obliterated the day before operation and there was considerable increase of pain, though never very severe; not enough so that the thighs were flexed. Her facial expression was quite drawn. On the day of operation the leukocytes rose rapidly to 17,000, never before in many counts having been above 8,000. There was no muscle spasm, but tenderness was increased and respiratory movements more limited so that an operation was decided upon, in spite of the fact that blood pressure remained constantly between 115 and 122 and that peripheral stimulation of the skin and central stimulation with strychnia caused a rise in pressure, showing that the vasomotor mechanism was active. Operation revealed no peritonitis or perforation, although over the base of two ulcers there was a slight amount of fibrin. In this case hemorrhage was considered but excluded because the temperature and blood pressure had not fallen.

I do not wish to intimate from the history of these cases that estimation of the blood pressure is the one and only thing to be taken into consideration in making a diagnosis of typhoid perforation, but I consider that it should take its place as an important factor in forming an opinion and believe that conclusions drawn from it are of more import than from leukocytosis or distension, and that it should be ranked with muscle spasm, muscle rigidity, general expression and sudden pain.

185 SUMMER STREET.

Intestinal Surgery.

A Study of the Treatment of a General Spreading Peritonitis.

By MARSHALL CLINTON, M. D., Buffalo, N. Y.,

Attending Surgeon, Sisters of Charity, and Erie County Hospitals, Buffalo, N. Y.; Instructor in Surgery in the University of Buffalo.

THERE is probably no subject on which a wider difference of opinion will be found among leading operators of today than in their treatment of a spreading peritonitis following perforation of a septic appendix. Individual opinion is generally based on clinical experience, but many men of equal experience hold opposite views of the proper treatment of this condition. Until this subject is settled one way or the other, every case which may shed light on the value or uselessness of each type of

procedure should be added to the side where it belongs. The following case offers some interesting features:

On January 28, W. H., aged 20, felt a sudden, sharp pain in the right lower quadrant of his abdomen while lifting some timber. He left work, went home and was confined to his bed and under medical advice. The pain increased, his abdomen became distended on the following day and he began to vomit. There was a slight raise in temperature and a pulse running from 100 to 120. There was constipation and enemas were without result.

I was called to see the patient January 29, in the evening, and expressed the opinion that he would die unless an operation was performed at once. This was refused until twelve hours later when the condition of the patient became so serious that operation was accepted as the only chance for him.

The patient entered the hospital with a pulse of 140, temperature 96°, vomiting continued and he was extremely prostrated.

He was prepared for immediate operation. An incision over the appendix revealed a quantity of creamy, foul-smelling pus that seemed to fill the entire abdominal cavity. There were few adhesions and pus was found in every part. Openings were made in the middle line, on opposite side and in both flanks. Over ten gallons of hot salt solution were used to flush out his belly, and at the end of that irrigation his general condition seemed slightly improved and the abdominal cavity apparently clean. Large drainage tubes wrapped with gauze were introduced into each incision, draining most of the peritoneal cavity. Twelve hours later while lying in bed with the head of the bed raised to drain the abdomen by gravity he was again irrigated with a large amount of salt solution and a considerable quantity of the same creamy, foul pus was washed out of the tubes as found at the first irrigation.

The next day, or twenty-four hours later, the abdominal cavity was found clean on irrigation and the tubes all adherent. The patient convalesced rapidly and recovered completely except for a fecal fistula which had to be closed by a second operation on March 9. He was discharged from the hospital with instructions to watch for a possible obstruction developing and explicitly cautioned to watch for the point of obstruction should it occur.

On April 8, at 6 in the morning, the patient telephoned that he was in pain and wanted me at once. He had begun to vomit and said he had felt obstructed since 3 o'clock the previous afternoon. He designated the point of obstruction and wished to go to the hospital immediately. He was entered and prepared for operation. An incision over the point he had indicated along the outer border of the right rectus muscle showed the upper portion of the ileum constricted by an adhesion band. This was easily released with the finger and, milking the contents of the intestine into the empty lower bowel, the incision was closed

tightly. This wound healed in ten days and the patient has been gaining in health and strength since his discharge from the hospital.

The interest in this case seems to be that the patient did well with wide and free drainage for the first few hours, and his peritoneum cleaned up after about twenty-four hours with copious irrigation. One would judge from the result of the second irrigation that it was a wise procedure, in that it removed a large amount of material which would have remained in his belly to be absorbed. Of course this class of cases is liable to develop an obstruction subsequent to operation from contraction of adhesions, but when the patient is warned and the nature of the trouble explained, there is generally little trouble in obtaining consent to early successful operation.

466 FRANKLIN STREET.

CORRESPONDENCE.

William R. Warner & Co.'s Exhibit at Saint Louis.

Editor Buffalo Medical Journal:

SIR—We have an interesting exhibit at the Saint Louis Exposition located in the Palace of Liberal Arts, and, inasmuch as no general information is given out as to where pharmaceutical and chemical displays are shown, we have thought it would be of general interest to your subscribers to have the fact laid before them, not only as to our particular exhibit, but the class generally. If it is consistent with your practices, we would like to have you give prominence in your pages to the facts presented.

WM. R. WARNER & CO.

Philadelphia, May 25, 1904.

CARDIAC HYPERTROPHY.—*Cactus grandiflorus* (*Flint's Encyclopedia*) may be called for when the heart's action is much excited, with a sensation as if the heart were grasped or constricted. Hare advocates perfect rest; moderate amounts of nonstimulating foods—no wines or coffee; inunction of small amounts of veratrine ointment or application of belladonna plaster over pericardium if heart's action very excessive; aconite or veratrum viride internally. —*Denver Med. Times.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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No. 12

The American Medical Association at Atlantic City.

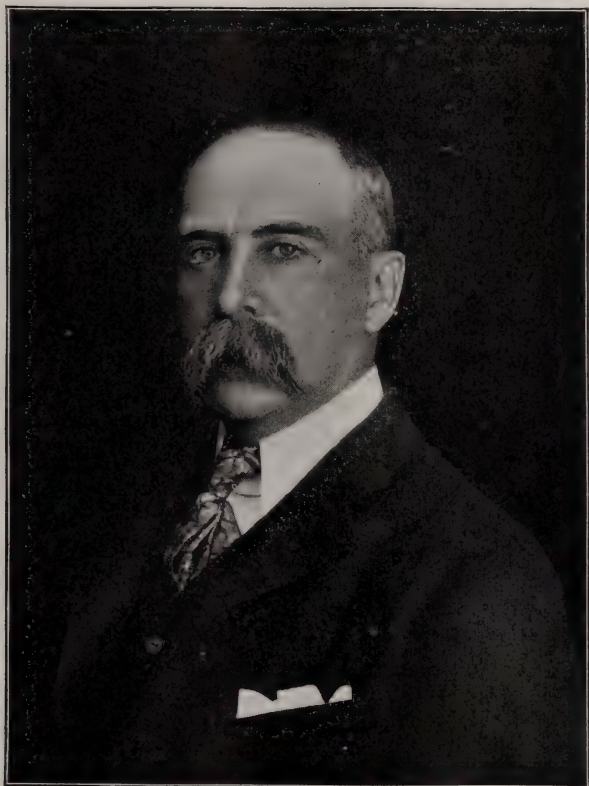
THE fifty-fifth annual meeting of the American Medical Association presents some distinguishing features that deserve consideration. The experiment of holding two meetings at one place within the short period of four years was tried at Atlantic City, and proved successful in a marked degree. The registration of 2,890 members and visitors was unprecedented in the history of the association, being nearly 900 more than the total registration at the same place in 1900.

One reason for the increase in these figures is the nearly accomplished unification of the profession in the state of New York. Recognising this fact, the President of the American Medical Association courteously invited the members of the Medical Society of the State of New York to attend and participate in the scientific and social features of the meeting. It appears that about 250 members availed themselves of this privilege, which indicates that the rank and file of the profession in this state recognise the fact that the schism which has existed for twenty-two years is at an end, the formal action of the supreme court only being required to officially terminate it.

Another element contributing toward success is the improved organisation of the national body, which manifested itself strongly at Atlantic City. Following the method of the Medical Society of the State of New York, which for nearly a century has made the county society the basic unit of representation, the American Medical Association a few years ago adopted a similar plan, and its advantages became apparent in the increased attendance and smooth working of affairs at the last meeting. The house of delegates, a new feature inaugurated at Saratoga two years

ago, also showed increased strength and great improvement as a legislative body.

The scientific work of the association was never better done than at this meeting. The addresses on medicine, surgery and state medicine, one and all, were of a high order, while the section work kept pace with the spirit of progress that everywhere prevails in scientific bodies. The president's address, too, is to



LEWIS S. MCMURTRY, M. D.

be reckoned as a state paper of dignity and importance. All these conditions conspired to make the meeting of 1904 inemorable, and one that may be called the best in its history without disparagement to any that have preceded it.

The election of officers resulted as follows: president, Lewis S. McMurtry, Louisville, Ky.; vice-presidents, Edward Jackson, Denver, Colo.; James Hall Bell, San Antonio, Texas; F. C. Shattuck, Boston, Mass.; B. C. Pennington, Atlantic City, N. J.;

secretary, George H. Simmons, Chicago; treasurer, Frank Billings, Chicago; trustees, T. J. Happel, Trenton, Tenn.; W. W. Grant, Denver, Colo.; Philip Marvel, Atlantic City, N. J.; place of meeting, Portland, Ore.; orators,—address in medicine, Charles G. Stockton, Buffalo, N. Y.; address in surgery, John Collins Warren, Boston, Mass.; address in state medicine, George Blumer, San Francisco, Cal.

PRESIDENT McMURTRY.

Dr. Lewis S. McMurtry, of Louisville, the president-elect, is a representative of the best type of the American physician of the present period. Born at Harrodsburg, Ky., September 14, 1850, his early life was developed in that rich agricultural region, famous alike for its blue grass and the strength of character of its citizens. His Scotch ancestry bespeaks a sturdiness of manhood which is typified in the sweet life of his mother, now more than ninety years old and still in the enjoyment of clear faculties and splendid physical health. His early education was obtained at Center College, Danville, from which he received the baccalaureate degree in 1870, which was supplemented by the degree of M. A., in 1874. He received his doctorate degree from Tulane University, New Orleans, in 1873, and immediately entered the Charity Hospital in that city, where he served a year as interne and chief of clinic.

Dr. McMurtry began the practice of his profession at Danville in 1874. In 1881, he became professor of anatomy in the Kentucky School of Medicine, at Louisville. He devoted a portion of 1883 to the study of gynecologic and pelvic surgery at Philadelphia. While residing at Danville he was appointed chairman of the McDowell memorial committee, by the Kentucky State Medical Society, and through his active work the memorial was completed and the monument dedicated May 14, 1879.

Dr. McMurtry was elected president of the Kentucky State Medical Society in 1888. He spent a portion of the winter and spring of 1889 in Europe, returning in season to preside at the meeting of the society at Richmond, in May of that year. He became professor of gynecology and abdominal surgery in the Hospital College of Medicine at Louisville in 1890, and soon afterward was elected president of the faculty, this college being the medical department of Central University. He became one of the founders of the American Association of Obstetricians and Gynecologists in 1888, and served as its president in 1893. He was also a founder of the Southern Surgical and Gynecological Association, of which he was president in 1891. In 1883, he served as a member of the first board of trustees of the American

Medical Association and played an active part in establishing the *Journal* of that body on an enduring basis. Dr. McMurtry's Infirmary at Louisville is concededly as fine a private hospital in its location, equipment and life-saving record as has ever been established in this country. His record as a surgeon in successful work performed in the abdominal and pelvic cavities is not second to that of any man, living or dead. He is a hard worker, a brilliant operator, and an indefatigable attendant at the bedside until his patient is safely convalescent.

Dr. McMurtry has contributed liberally to the literature of medicine, especially as relates to gynecology and abdominal surgery. His papers cover a wide field of subjects and are found in society transactions and journals published during the last twenty-five years. He also contributed the chapter on surgery of the uterus to the *International Textbook of Surgery*, as well as several chapters to *Reed's Textbook of Gynecology*. He is gynecologist to Saints Mary and Elizabeth hospital, to the Gray Infirmary and to the Louisville city hospital. He is a Fellow of the Edinburgh Obstetrical Society, of the British Gynecological Society, a corresponding member of the Philadelphia Obstetrical Society, and an honorary member of the Medical Society of the State of New York. He was one of the founders of the International Periodical Congress of Gynecology and Obstetrics, and of the Pan-American Medical Congress, acting as president of the section on obstetrics and gynecology at the first meeting of the latter at Washington, in 1893.

From the foregoing it will be observed that Dr. McMurtry has been an active member of the American Medical Association for more than twenty years, during which time he has served as chairman of the section on obstetrics and gynecology, as chairman of several important committees, as a member of the board of trustees, and of the house of delegates. He is, therefore, thoroughly conversant with all the details of the organization from the lowest step to the highest, and his selection as president is the direct outgrowth of a long series of duties well performed and may well be regarded as a reward for faithful, meritorious, and eminent service rendered the association and the profession of medicine.

"Keep in Touch with Buffalo."

ON THE completion of their lecture courses it is customary for the professors of the medical department of the University of Buffalo to address the senior class, give the students advice of a general character, and wish them well in an informal

way, in the careers they are about to enter upon. It marks the severance of relations between teacher and student and the words of kindly admonition usually sink deeply into the minds of the young physicians.

At the close of the last term of the medical department, one of the professors in the course of his remarks spoke of the work the University of Buffalo was doing and had been doing for more than half a century. He touched on the efforts of the successive faculties to bring the institution to the high state of efficiency it has attained, and predicted a greater future for the medical school which, beginning as an isolated little structure on the site of the old postoffice building, has grown to the magnificent proportions of the present High street group of University edifices. "But," he said, "the graduates must do their share of the work of making the University a really great place of learning. Don't forget the University," he said. "Don't go away and bury yourself. Keep in touch with Buffalo." That sentence is the key note of success for the University of Buffalo, and it applies to those who are residents of Buffalo as well as to those who have made their homes elsewhere. Keep in touch with Buffalo!

There are institutions of medical learning where the faculties are larger in numbers; where the list of instructors and lecturers presents an array of names covering page after page of the annual announcements; where every department of medicine and surgery is represented by a professor, clinical professors, instructors, clinical instructors, lecturers and demonstrators; but few institutions can better equip a man for the practice of medicine than the University of Buffalo. The chief difficulty with the University and the one serious bar to its becoming internationally known, save through the personality and reputations of such men as Park and Stockton and Mann and Cary, and their associates, is that it is not pushed. It has instead been conducted along the narrow lines of ethical standing. It has reached its present position after half a century of hard, unremitting work. The same position might have been reached in half the time with proper publicity. It receives students who present themselves; it has advertised its existence in a few medical journals and it sends out catalogues as does nearly every medical school. But it has lacked the advantages of an admissible amount of commercialism. Without endowments or other financial aid, battling through long decades of its existence, the faculties have given their best efforts, their time and all that was theirs to give for the advancement of the institution, and it stands today as a monument to their self-sacrifice in the cause of higher education,—one of the most carefully and scientifically conducted medical schools in the world. These

men have taught medicine; they have not taught fads and fancies as have two internationally famous schools, one of which turns out notoriously arrogant and self-satisfied graduates and the other of which sends out good physicians but poor citizens, because they are saturated with antagonism to existing state laws regulating the licensing of practitioners of medicine.

The University of Buffalo has no fads; its aim and the endeavor of the men composing the faculty is to make good able men of its students; men who while they may not have the prestige of any one of the more exclusive institutions, are possessed of ability to properly diagnosticate disease conditions and intelligently and properly treat them. Geographically, it is admirably located; its clinical facilities are unsurpassed; its professors are eminent in scientific lines and in their ability to impart their knowledge to students. Then why is not the University of Buffalo one of the few really large instead of one of the many smaller medical colleges? Chiefly because we have not all kept in touch with Buffalo. Graduates have not shown the interest they should have shown in the institution after leaving it. On the other hand, has the faculty taken any steps to maintain interest in the college? Has the Council?

It will be conceded that the gentlemen at the head of the institution are very busy and have in spite of that fact devoted a great deal of their time to its advancement; they have done all that might properly be expected of them, and more, too, individually and collectively, but it might be productive of results if suggestions for the betterment of the college were invited, considered and acted upon.

It would be properly within the limits of permissible publicity to have the coöperation of an advisory committee made up of progressive men of business. Wisdom would seem to point to some of the newspaper proprietors as members of such a committee. Mr. George E. Matthews of the *Express*, has always been friendly to the University and its interests. Mr. E. H. Butler of the *News*, has not only been a friend of the University but has done much for it in a substantial manner. It was through the efforts of Mr. Butler and Dr. Park, seconded by Drs. Mann, Cary and Stockton, that the University secured the establishment of the cancer research laboratory, and it has been through the untiring efforts of these same gentlemen that the appropriation has been secured from year to year in spite of purely political opposition. Such a committee as this might well work independently of, but in thorough accord with, the members of the faculty and the council, and its secretary, in order that the bond of union between the bodies be closer, could be made assistant to

the secretary of the faculty. Such an arrangement would be productive of nothing but good for the University of Buffalo and the efforts of the faculty and council to advance the interests of U. of B. would be materially aided. Of course, it is not necessary to here enumerate the methods by which university advancement would be accomplished; suffice it to say that results surely would be accomplished. The JOURNAL is committed to the advancement of the University and to that end has in course of preparation university material expecting it will be inaugurated in the fall as a part of the publication. But no matter what the JOURNAL may do individually as a publication, no matter how ceaselessly the faculty may labor as a body or as individuals, it will be uphill work and slow unless the alumni "keep in touch with Buffalo," and unless the outside world is placed in touch with the University of Buffalo and made familiar with it.

Purification of the Mails.

THE government of America is not oppressive. Complaint is seldom made that our people are governed too much. Our laws are human and beneficent; this is not surprising, as we make them ourselves. This is true of our laws in general and it is also true with greater particularity of the law for the protection of the health of the people known as the public health law.

Among others of its important provisions the public health law prescribes who may and who may not practise medicine in this state, and as the practice of medicine has ever been a reasonably lucrative vocation, its opportunities for money making have always been attractive. Again, the practice of medicine offers limitless opportunities for the exhibition of the devices of the fakir. All men and some women are credulous,—none more so than the sick, especially those incurably or hopelessly afflicted.

For many centuries a vast and varied horde of grafters, looters, fakirs, boy wonders, camp followers and healers have preyed upon and plundered the credulous and the sick with promises of healing,—healing swift and sure. The arts and the devices of this class of criminals depend largely upon advertising,—advertising in every possible way their audacious and mendacious claims. Cheap wood pulp paper and the omniverous all-devouring rotary printing press, have made the fake healer possible and often profitable.

For centuries the profession as individuals and as membership corporations has protested, has warned, has admonished. At length it would seem that a brighter and better day is at hand. The American government has given notice that its mails can-

not be longer used to foster and promote the fraudulent operations of the medical fakirs and imposters; that colored water cures for consumption and cancer are frauds and their advertisements unmailable; that sure cures for the opium and whiskey habits, which contain large quantities of morphia and alcohol, are frauds and the parties to its propagation are criminals, and the newspapers printing their advertisements are unmailable; that invitations to unfortunate girls and still more foolish or wicked wives to have abortions procured "while you wait" are contrary to public policy, and that the abortion trade can no longer use the mails for correspondence or for distributing papers containing such advertisements.

We are confident no more important step in the interest of the public health, of general morality and of the well-being of the American people has been taken or will be taken during the century. The administration is wise and will prosper exceedingly which dares and does so much. The American Medical Association at its recent meeting took action commendatory of this important step which is being taken by the postoffice department at Washington.

PERSONAL.

Dr. CHARLES G. STOCKTON, of Buffalo, at the recent meeting of the American Medical Association was chosen to deliver the oration in medicine at the Portland, Ore., session next June. Dr. Stockton, who is professor of medicine at the University of Buffalo, occupies an enviable position as an author and teacher, and the honor that has thus come to him is fittingly bestowed. He will adorn the place to which he has been elected, and we venture the opinion that his oration will be an important feature of the meeting.

Dr. ROSWELL PARK, of Buffalo, delivered the address on surgery at the annual meeting of the State Medical Society of Wisconsin, at Milwaukee, June 23, 1904, choosing for his subject, The surgical treatment of "dyspepsia." We take pleasure in presenting this important paper in full elsewhere in this edition of the JOURNAL.

PROFESSOR DR. ALBERT HOFFA, of Berlin, the most eminent orthopedist in Germany, visited Buffalo during June, accompanied by his assistant, Dr. Spitze. During his stay in Buffalo, Dr. Hoffa was the guest of Dr. Roswell Park.

Dr. ERNEST WENDE, of Buffalo, was elected to membership in the American Dermatological Association, during its recent meeting held at Niagara Falls.

Dr. GEORGE BEN JOHNSTON, of Richmond, was elected president of the American Surgical Association during its recent meeting at Saint Louis. Dr. Johnston is an exponent of the best surgery of the day, and is the leading surgeon south of the Potomac, therefore his elevation to the highest surgical honor in America is opportune, while he is yet in the most useful period of his life.

Dr. F. PARK LEWIS, of Buffalo, was elected president of the board of managers of the State School for the Blind, at Batavia, at the annual meeting of the board, held at the institute, June 1, 1904.

Dr. FREDERICK J. BARRETT, of Buffalo, is spending the summer in Europe, taking a special course in ophthalmology, and visiting the eye clinics in the principal hospitals of London, Paris and Berlin.

Dr. CYRUS P. PECKHAM, surgeon United States Marine Hospital and Public Health Service, has been assigned to duty in Buffalo, vice Eugene Wasdin, transferred to Memphis.

Dr. CHARLES L. BONIFIELD, of Cincinnati, was elected chairman of the section of obstetrics and gynecology at the recent meeting of the American Medical Association. Dr. Bonifield's excellent service as secretary during several years past receives through this promotion most appreciative expression. Dr. Walter P. Manton, of Detroit, who was chosen secretary of the section, vice Dr. Bonifield promoted, is experienced in medical society affairs, and will prove a most capable officer.

Dr. E. C. DUDLEY, of Chicago, the distinguished teacher and the author of that superb textbook, "Dudley's Gynecology," was elected president of the American Gynecological Society during its recent meeting at Boston.

Dr. LUCIEN HOWE, of Buffalo, sails in July to attend the International Ophthalmological Congress at Lucerne. He will read a paper, with demonstration, on "Photographic measurements of the time required for lateral movements of the eye." He also will take part in the meeting of the British Medical Association, and will stay with the ophthalmologic section at Keble College, Oxford.

OBITUARY.

Dr. HENRY D. INGRAHAM died at his home in Buffalo, May 23, 1904, after a prolonged illness, aged 62 years. He was a native of New Hampshire, but his youth and early manhood were spent in the neighborhood of Arcade, N. Y., where he was educated at the common schools and at the Arcade Seminary. For a time



HENRY D. INGRAHAM, M. D. 1842-1904.

he taught in the common schools, and in 1863 began the study of medicine in the office of the late Dr. Lucius Peck, of Arcade. He attended medical lectures at the University of Buffalo, and graduated from that institution February 21, 1866.

Dr. Ingraham began the practice of medicine at East Randolph, N. Y., but soon settled at Kennedy, N. Y., where he associated himself with the late Dr. William Smith. He established there a large and lucrative practice, remaining until 1880, when he re-

moved to Jamestown, N. Y., but after a few months decided to locate at Buffalo. He came here in 1881, and this city has since been the scene of his activities until his death. He developed a special liking for gynecological surgery and, while never entirely relinquishing family practice, he came to be recognised as one of the leading gynecologists, and in this department of practice he won the confidence and following of a large professional circle.

In 1883, Dr. Ingraham was one of the active organisers of the medical department of Niagara University, and until its union with the medical department of the University of Buffalo in 1898, he was its professor of gynecology and pediatrics. In the up-building of the department, he was an important factor. From 1898 to 1902, he was clinical professor of gynecology and diseases of children of the University of Buffalo. In 1883, he was appointed gynecologist to the Buffalo Hospital of the Sisters of Charity. Besides serving this institution most creditably as its gynecologist, he did much to advance its interests by supervising the erection of the new wing and other additions to the hospital, by coöperating with its authorities in many of the minor details of administration, and by aiding the establishment of the training school for nurses. After severing his connection with the Sisters' Hospital he became the gynecologist to the Riverside Hospital, continuing as such until his death. He was also one of the gynecologists to the Erie County Hospital from the time of its organisation until his death.

In medical societies he was active and influential. He was a member of the American Association of Obstetricians and Gynecologists, of the American Medical Association and also of the state, county and city organisations. In 1902, he was chairman of the section of gynecology and obstetrics of the Buffalo Academy of Medicine, and at the time of his death president of the Medical Union of Buffalo.

Dr. Ingraham was not a prolific writer, but he found time to publish occasional papers in the *BUFFALO MEDICAL JOURNAL*, the *American Journal of Obstetrics* and some other medical journals.

No man of character and ability can live and work in a community for a quarter of a century without leaving his impress upon it, this being especially true of the successful physician, and such was Dr. Ingraham.

He is survived by a wife and step-daughter, by three sisters, and by several nieces and nephews, among the latter of whom is Dr. Henry C. Buswell of this city.

A. A. H.

DR. MYRON H. ANDREWS, of Detroit, a graduate of the University of Buffalo, 1847, died at his home June 3, 1904, from pneu-

monia, aged 87 years. He was a physician of prominence, having served as health physician of Detroit for three years (1888 to 1891), and as surgeon of the Michigan Central Railroad for several years.

DR. LEWIS B. ANDREWS, of Rochester, N. Y., a graduate of the University of Buffalo, 1885, died at his home of heart disease, May 22, 1904, aged 46 years.

Dr. DELAVAN E. WALKER, of Ilion, N. Y., a graduate of the University of Buffalo, 1882, died at his home after a prolonged illness, May 18, 1904, aged 49 years.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists will hold its seventeenth annual meeting at the Hotel Monticello, Saint Louis, Tuesday, Wednesday, Thursday and Friday, September 13, 14, 15 and 16, 1904, under the following administration: president, Walter Blackburn Dorsett, Saint Louis; vice-presidents, Aaron B. Miller, Syracuse, and William D. Haggard, Nashville; secretary, William Warren Potter, Buffalo; treasurer, Xavier O. Werder, Pittsburg; executive council, Edwin Ricketts, Walter B. Chase, A. Vander Veer, Lewis S. McMurtry, L. H. Dunning and Rufus B. Hall.

The Hotel Monticello has been selected for the headquarters of the association, the management of which should be addressed concerning rooms and rates.

List of papers offered to June 28, 1904:

1. President's address, Walter B. Dorsett, Saint Louis.
2. Retrodisplacements as a cause of sterility; report of pregnancies following the Alexander operation, Herman E. Hayd, Buffalo.
3. Title to be announced, J. Henry Carstens, Detroit.
4. Cyst adenoma of the pancreas, L. H. Dunning, Indianapolis.
5. Some clinical reasons for advising early operations for fibroid tumors of the uterus, Rufus B. Hall, Cincinnati.
6. Operative treatment for relief of painful menstruation in virgins, W. A. B. Sellman, Baltimore.
7. Title to be announced, E. Gustav Zinke, Cincinnati.
8. Title to be announced, J. J. Gurney Williams, Philadelphia.

9. Pseudomembranous tubercular peritonitis, H. W. Longyear, Detroit.

10. The treatment of acute perforated gastric ulcer, Henry Howitt, Guelph.

11. Shall we remove all fibroid tumors of the uterus upon diagnosis? Thomas B. Eastman, Indianapolis.

12. Scar of sigmoid mesentery the cause of spastic obstruction of the bowels; with report of three cases, Hugo O. Pantzer, Indianapolis.

13. Surgical treatment of cicatricial atresia of the vagina, Charles G. Cumston, Boston.

14. Title to be announced, John B. Deaver, Philadelphia.

15. The advantage of limiting artificial interference in obstetric practice, A. P. Clarke, Cambridge.

16. Uterine myomas, with specimens, Joseph H. Branham, Baltimore.

17. Use of antistreptococcic serum in septicemia and scarlatina, with case histories, A. G. Hamilton, Springfield, Neb.

18. An unusual case with many of the symptoms of appendicitis, Magnus A. Tate, Cincinnati.

19. Conservation of the natural resistance of the patient in surgical work, Robert T. Morris, New York.

20. Title to be announced, J. E. Sadlier, Poughkeepsie.

21. Skeleton of an ectopic fetus removed by vaginal cystotomy, William D. Haggard, Nashville.

22. Title to be announced, L. S. McMurtry, Louisville.

23. Title to be announced, Charles A. L. Reed, Cincinnati.

THE American Institute of Homeopathy held its annual meeting at Niagara Falls, June 20-24, 1904. The registry bore the names of about 350 members. Dr. George Royal, of Des Moines, Ia., was elected president.

COLLEGE AND HOSPITAL NOTES.

THE Frederick Ferris Thompson Memorial Hospital, at Canandaigua, was dedicated June 14, 1904, with appropriate ceremonies. The JOURNAL acknowledges the courtesy of an invitation to attend and regrets its inability to accept.

DR. WALTER LINDLEY, of Los Angeles, the editor of the *Southern California Practitioner*, has been elected dean of the Medical

College of the University of Southern California, which is about to begin its 20th session. Dr. Lindley was one of the organisers of the school and is professor of gynecology in that institution.

Dr. ALBERT VANDER VEER has resigned as dean of the Albany Medical College, an office he has held for many years. This action was rendered necessary by a recent law which prevents a regent of the University of the State of New York acting as dean of a medical college. Dr. Samuel B. Ward has been chosen to fill the vacancy caused by Dr. Vander Veer's resignation.

BOOK REVIEWS.

THE WORTH OF WORDS. By RALCEY HUSTED BELL, M.D. With an introduction by William Colby Cooper, M.D. Duodecimo, pp. 332. Third edition revised and enlarged. New York: Hinds & Noble. 1904. (Price, \$1.25.)

With the assistance of Dr. William Colby Cooper, who writes the introduction, Dr. Bell has sent out a work bearing the above title which will fit into many a hidden nook in the library. The book isn't a big one, but there is a lot of material in it. There is an appendix, too, in which Dr. Bell has a few words to say "as to reviewers." He refers to those who appear to have said unkind things about his work, as "several gentlemanly jaybirds," and "asses." Hoity-toity and forsooth and alackaday! It be wise to closely scan one's review of Dr. Bell's *Worth of Words* before exposing oneself to the bitterness of his reproach. And yet on second thought why fear reproach when one recalls that, according to Tallyrand, words were made to conceal thought. The object of the work is to call attention to the misuse of words and to point out the most flagrant of common errors. There is much common sense in the book; it might be used to advantage in many newspaper offices and most sewing circles; but Dr. Bell's work in the field of slang is unsatisfying. He does not pretend to give a complete description of all the slang in use, very properly admitting that to attempt to do so would require many volumes; but his brief résumé does not represent the slang of to-day. Dr. Bell appears to have touched only the bumps on the surface of the subject. He refers to "sky pilot" as an exquisite bit of slang, which it is, and adds that "it is a good word and much better than parson, preacher, minister, dominie, priest." This coming from the author of "*The Worth of Words*" is almost ghastly. "Sky pilot" is pure slang and is applicable to all denominations, even the itinerant exhorter who has nothing but words and an abiding faith on which to build his hopes. On the

other hand "bible banger," another exquisite bit of descriptive slang which Dr. Bell has overlooked, is expressive of those acrobatic ministers of the gospel who literally propound and actually bang the Bible to rags during their discourses. Slang is the dressing of our language; it is characteristic of the people of this country; all nations have slang, and it is characteristic of the American people that their slang fits. It is always apropos. The United States troops probably would have fought as bravely to the air of "Onward Christian Soldiers" in the Santiago campaign, but it is doubtful if there would have been injected into the campaign so much of the ginger of genuine enthusiasm as was shown when the bands played "There'll be a Hot Time in the Old Town Tonight." As noted above, Dr. Bell referred to some of his reviewers as "gentlemanly jaybirds." In his slang department he says: "Jaybird is an epithet of mild ridicule or contempt, according to circumstances," which tells what he thinks of the wicked reviewer. In this connection a slangy one might properly say that Dr. Bell had a "grouch" when he answered his critics. Had he been more severe in his comments on the "gentlemanly jaybird," he would have approached a condition known in slangdom as "red-headed."

N. W. W.

A SYSTEM OF PRACTICAL SURGERY. By Drs. E. von BERGMANN, Berlin, P. von BRUNS, Tübingen and J. von MIKULICZ, Breslau. Translated and edited by William T. Bull, M.D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York, and Walton Martin, M.D., Instructor in Surgery, College of Physicians and Surgeon, New York. To be complete in five imperial octavo volumes. Volume I, pp. 936. With 361 engravings and 18 plates. Philadelphia and New York: Lea Brothers & Company, 1904. (Price, per volume: cloth, \$6.00; leather, \$7.00; half morocco, \$8.50.)

The literature of surgery has been enriched during the past ten years by numerous contributions of value, consisting of textbooks, encyclopedias, monographs and brochures, but it is doubtful if any one of them has excited more interest among surgeons throughout the world than the one under consideration. We need not go far to discover the reasons for this fact; it is an exposition of modern surgery from the German viewpoint; the authors are three most conspicuous surgeons representing the advanced thought of continental Europe; it is translated and edited by two American surgeons whose fame, especially that of Dr. Bull, is world wide. Moreover, while it is encyclopedic in character, it is exhaustive, or as nearly so as any general treatise can be.

The volume under consideration deals with the surgery of the head and contains 966 pages,—more than ever have been devoted to that subject in a single volume. It begins with injuries of the head before birth and during labor, and discusses all phases

of injuries and diseases of the skull and its contents; then malformations, injuries, and diseases of the ear receive due attention; next malformations, injuries and diseases of the face, and plastic operations are considered; then follow in regular order neuralgias of the head; anomalies, injuries, and diseases of the salivary glands; injuries and diseases of the jaw; malformations, injuries and surgical diseases of the nose and its adjacent tissues; malformations, injuries and diseases of the mouth; and, finally, malformations, injuries and diseases of the pharynx.

The surgery of the brain, particularly for abscess, operative exposure of the mastoid cells, the surgical treatment of epilepsy, and plastic operations for cleft formations, are of particular interest, and all the newer methods of dealing with these several conditions are set forth with precision; indeed, this may be said of all the operative procedures described in the book. If, in addition, good printing and abundant high-class illustrations enhance the value of a book, assuredly this one is of the best.

ANNUAL REPORT OF THE SURGEON-GENERAL OF THE PUBLIC HEALTH AND MARINE HOSPITAL SERVICE OF THE UNITED STATES. For the fiscal year 1902. Washington: Government Printing Office. 1903.

The material in this volume is of great interest to the sanitarian and public health officer. A portion of it also is of great interest to the clinician; for example, that part treating of the sanatorium for consumptives at Fort Stanton, New Mexico. The division of foreign and insular quarantine should be read by everybody who thinks this work is a sinecure, or that it is imperfectly performed. One of the items alone represents great labor—namely, the disinfection of 110,713 pieces of baggage at the Manila and Mariveles stations, 382 vessels also having been disinfected at the latter station. The Surgeon-General and his assistants are entitled to the greatest praise for the efficiency of their work, and for the faithfulness with which they guard all the avenues through which infectious diseases are liable to reach the United States.

The book is interestingly illustrated with half-tone plates showing various phases of the work, and may be said to be an object lesson in preventive medicine.

A MANUAL OF GENERAL PATHOLOGY. For Students. By SIDNEY MARTIN, M.D., F.R.S., F.R.C.P., Professor of Pathology at University College; Physician to University College Hospital, London. Octavo, pp. 521. Illustrated. Philadelphia: P. Blakiston's Son & Company. 1904. (Price, \$4.00.)

The arrangement made use of by this author is well adapted to the needs of the student, and is calculated to simplify the study of pathology as much as is consistent with a due regard to the

importance of the subject. Beginning with inflammation, Martin takes the student through its various manifestations to infection, then to the degeneration and regeneration of cells and tissues; describes the changes in the circulation and respiration in disease; the changes in the blood occurring during disease processes; hemorrhage and pigmentation; the effects of disease of the liver, of the kidneys and the ductless glands; changes in metabolism; and, finally, the changes in the nervous system.

Martin is intensely interesting in his chapters relating to the blood, a subject that easily becomes a most important study in the light of recent researches. Scarcely less so, however, is he on the effects of disease of the kidney on the economy, which are herein set forth with great directness. The changes in metabolism, too, are presented with a clearness that make them more easily comprehended by the student than is usually the case in such works. Whatever method contributes to the better understanding of pathology is worthy of hearty commendation, since it is an integral part of the science of internal medicine. Whoever, then, presents such a book deserves the gratitude of students and practitioners alike, for developing and putting into practical use a method of teaching so valuable.

Martin's manual is preëminently a work of this character and, unless we greatly misjudge the acumen of teachers, it will receive their commendation, and so be placed high up on the list of textbooks in the college announcements.

THE PRINCIPLES AND PRACTICE OF HYDROTHERAPY. A Guide to the Application of Water in Disease. By SIMON BARUCH, M.D., Professor of Hydrotherapeutics in the New York Post-Graduate Medical School and Hospital. Octavo, pp. 506. Illustrated. New York: William Wood & Company. 1903. (Price, \$4.00.)

In the present revised edition of this work the author's aim is to help physicians to attain a real knowledge of scientific hydrotherapy. He treats the subject in a systematic manner, points out limitations and probabilities, and records actual achievements. He tells us many things about the scientific employment of water in the treatment of disease and presents in a convenient form, and unconventional style of language a certain number of elementary facts, ideas, and suggestions which the ordinary practitioner, laying no claim to hydrotherapeutic attainments generally, is usually glad to know.

The book is divided into two parts. The first is mainly theoretical in that it deals with the principles which underlie the application of water, and includes the most recent views upon the physiological effects of water, functions of the skin, rationale of the action of water in health, and its reaction.

The second part contains technical and clinical chapters. Details of the most useful methods are given as a guidance to

the skilful, beneficial and effective application of water in disease. It is plain that Dr. Baruch's success in the treatment of the various diseases mentioned depends upon experience and judiciousness of method.

Whoever has the opportunity of extensive observation of this subject may not only find in it the justification of publishing his views, but an obligation to present them to the profession for the furtherance of both scientific and humanitarian progress. There are numerous good illustrations in the book.

E. W.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume II. General Surgery. Edited by John B. Murphy, M.D., Professor of Surgery, Northwestern University Medical School. Duodecimo, pp. 566. Chicago: The Year Book Publishers. 1903. (Price, \$1.50; entire series, \$5.50, payable in advance.)

The editor of this volume has displayed his usual surgical judgment in selecting and arranging an excellent group of subjects for presentation to the general practitioner. It would be well for every such person to read with care what is herein said in regard to anesthesia and operative technic. Murphy presents a case, with two plates, of multiple sarcoma of the entire body surface which is of rare interest; also one of carcinoma of the thyroid with secondary carcinoma of the chest wall and femur with photographic illustrations. Mitchell's operation for hemorrhoids, and May's operation for umbilical hernia, are among the operations of interest described and illustrated. The book is full of practical thoughts and suggestions which every one called upon to practise surgery will appreciate.

MEDICAL UNION NUMBER SIX. By WILLIAM HARVEY KING. Sextodecimo, 60 pages. New York: The Monograph Press, 1904. (Price, 35 cents.)

This book is given to the professional world as a satire on unionism and, although the author does not say so in so many words, it doesn't need more than ordinary intelligence to grasp that idea. Without going into any extended criticism of the literary style of the work, out of deference to the feelings of the author, it is rather difficult to guess just why he should have selected so dignified a profession as medicine to illustrate his satire.

The basic idea of the book is impossible. Whatever one's personal opinion may be regarding the benefits or evils of trades' unionism he cannot read of the action of Medical Union No. 6, with its improbable doctors and its impossible "riding dele-

gates," without a feeling of repugnance which later changes to pity for the misguided literary efforts of a promising writer, who so far loses sight of the fundamental principles of medicine as to permit,—even in a satire,—a physician to leave a dying child to choke to death with croup, because croup came under the care of the throat physician, and union rules forbade him,—a chest doctor,—going outside the prescribed limits of his specialty even to save life

That is one of the things that robs the book of its satire and brings it close to the thistle field of assininity. A really good satirical work, to rank among the gems, must have polish and be builded on fact. Medical Union No. 6 lacks both. Yet it is readable, for all that, and it could with much right, occupy a place in a literary museum among the curiosities.

N. W. W.

BOOKS RECEIVED.

Medical Diagnosis. Special Diagnosis of Internal Medicine. A Handbook for Physicians and Students. By Dr. Wilhelm v. Leube, Professor of Medicine, and Physician-in-Chief to the Julius Hospital at Würzburg. Authorised Translation from the Sixth German Edition. Edited, with Annotations, by Julius L. Salinger, M.D., late Assistant Professor of Clinical Medicine in the Jefferson Medical College, and Physician to the Philadelphia Hospital. Octavo, pp. 1084. With five colored plates and 74 illustrations in the text. New York and London: D. Appleton & Co. 1904. (Price, \$5.00.)

American Edition of Nothnagel's Practice. Tuberculosis and Acute General Miliary Tuberculosis. By Dr. G. Cornet, of Berlin. Edited, with additions, by Walter B. James, M.D., Professor of the Practice of Medicine in the College of Physicians and Surgeons (Columbia University), New York. Octavo, 806 pages. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Cloth, \$5.00 net; half morocco, \$6.00 net.)

American Edition of Nothnagel's Practice. Diseases of the Intestines and peritoneum. By Dr. Hermann Nothnagel, of Vienna. Edited, with additions, by Humphrey D. Rolleston, M.D., F.R.C.P., Physician to Saint George's Hospital, London, England. Octavo, 1032 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Cloth, \$5.00 net; half morocco, \$6.00 net.)

Modern Ophthalmology. A Practical Treatise on the Anatomy, Physiology, and Diseases of the Eye. By James Moores Ball, M.D., Professor of Ophthalmology in the Saint Louis College of Physicians and Surgeons. Royal octavo, pp. 820. With 417 illustrations and 21 colored plates, nearly all original. Philadelphia: F. A. Davis Company. 1904. (Price: cloth, \$7.00 net; half morocco, \$8.50 net.)

Annual Report of the Surgeon-General of the Public Health and Marine Hospital Service of the United States for the fiscal year 1903. Washington: Government Printing Office. 1904.

Obstetric and Gynecologic Nursing. By Edward P. Davis, A.M., M.D., Professor of Obstetrics in the Jefferson Medical College and in the Philadelphia Polyclinic. Duodecimo, 402 pages, fully illustrated. Second edition, thoroughly revised. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Polished buckram, \$1.75 net.)

Epilepsy and its Treatment. By William P. Spratling, M.D., Superintendent of the Craig Colony for Epileptics at Sonyea, N. Y. Octavo volume of 522 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Cloth, \$4.00 net.)

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfurt a. M. Authorised American edition, translated under the direction of Boardman Reed, M.D., Philadelphia. Part V. Concerning the Effects of Saline Waters on Metabolism. New York: E. B. Treat & Company. 1904. (Price, 75 cents.)

Railway and other Accidents with Relation to Injury and Disease of the Nervous System. A Book for Court use. By Allan McLane Hamilton, M.D., F.R.S.E., New York. Octavo, pp. 363. Illustrated. New York: William Wood & Company. 1904. (price, \$3.50.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume V. Obstetrics. Edited by Joseph B. DeLee, M.D., Professor of Obstetrics, Northwestern University Medical School. Chicago: The Year Book Publishers. 1904. (Price, \$1.00; entire series, \$5.50, payable in advance.)

The Utero-Ovarian Artery. Anatomy and Physiology with their Application in Diagnosis and Surgical Intervention. By Byron Robinson, M.D., Chicago. E. H. Colegrove, Chicago. 1903. (Price, \$1.00.)

Medical and Surgical Report of the Presbyterian Hospital, New York City. Volume VI., January, 1904. Edited by Andrew J. McCosh, M.D., W. Gilman Thompson, M.D.

The Clinical Study of Blood-Pressure. A Guide to the Use of the Sphygmomanometer. By Theodore C. Janeway, M.D., Lecturer on Medical Diagnosis, University and Bellevue Hospital Medical College, New York. Small octavo, pp. 313. Illustrated. New York and London: D. Appleton & Company. 1904. (Price, \$3.00.)

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VI. General Medicine. Edited by Frank Billings, M.D., and J. H. Salisbury, M.D., Chicago. Duodecimo, pp. 330. Chicago: The Year Book Publishers. 1903. (Price, \$1.00; entire series, \$5.50, payable in advance.)

Progressive Medicine. Volume VI., June, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Philadelphia and New York: Lea Brothers & Company. (Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage paid to any address.)

Materia Medica for Nursing. By Emily A. M. Stoney, Superintendent of the Training School for Nurses in the Carney Hospital, South Boston, Mass. Handsome duodecimo volume of 300 pages. Second edition, thoroughly revised. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Cloth, \$1.50 net.)

Diseases of the Nose and Throat. By D. Braden Kyle, M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia; Consulting Laryngologist, Rhinologist and Otolologist, Saint Agnes's Hospital. Third edition, thoroughly revised and enlarged. Octavo volume of 669 pages, with 175 illustrations, and 6 chromo-lithographic plates. Philadelphia, New York, London: W. B. Saunders & Company. 1904. (Cloth, \$4.00 net; sheep or half morocco, \$5.00 net.)

LITERARY NOTE.

POLK's Medical Register and Directory of North America for 1904, has been issued and delivered to the subscribers. By this time it must have been examined or referred to sufficiently to impress those who use it with its great importance as a reference book whenever any person wishes to ascertain the name, residence, professional status, and other important data concerning physicians in the United States and Canada.

It is further of great value in supplying information relating to medical societies, hospitals, medical schools, boards of health, examining boards for license or pensions, medical laws, medical corps of the army, navy, or marine hospital service, medical journals, health resorts, and numerous other important organisations or institutions. Not every fact, of course, can be given regarding persons, or societies, or institutions, nor can it be expected that every item will be absolutely correct where so many people are involved, and such a vast number of societies, hospitals and other bodies and establishments are concerned.

It is, however, surprising that such a near approach to perfection has been made,—a fact only possible by reason of experience, each succeeding edition being better than the former. Moreover, if there is inaccuracy the fault lies with the physicians themselves, all having been addressed with requests to verify the published facts.

Polk's register is indispensable for editors, teachers, public officials, librarians, and all persons who find occasion to ascertain the addresses and essential data relating to physicians and institutions.

LATE NEWS ITEMS.

Dr. MAITLAND RAMSAY, of Glasgow, visited Dr. Lucien Howe during the latter part of June, on his way to the Saint Louis Exposition. Dr. Ramsay was the guest of the American Medical Association at its last meeting, and will return to Scotland in season for the meeting of the British Medical Association at Oxford.

Dr. NATHAN SMITH DAVIS, of Chicago, died at his home June 16, 1904, aged 87 years. He was a native of Greene, N. Y., and was a founder of the American Medical Association which, for a number of years, was practically dominated by his influence and personality. Of late years, however, he had not attended the meetings by reason of increasing feebleness.

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